

1 Cover Letter



April 30, 2013

Cindy Angelos
Parking Financial Manager
Attn: Contract Section,
Department of Public Works, Room 506
Municipal Building
841 North Broadway
Milwaukee, IL 53202

E-mail: cindy.angelos@milwaukee.gov
(414) 286-3314

RE: City of Milwaukee LPR System Proposal – Official Notice 48

Dear Ms. Angelos:

The undersigned, having examined the RFP including its instructions to proposers, the specifications, and all related documents for the proposed purchase of a Parking License Plate Recognition System.

Avrio RMS Group is pleased to present this proposal to the City of Milwaukee; Department of Public Works in response to the RFP for a Parking LPR System, Official Notice Number 48 dated March 28, 2013. Avrio RMS Group proposes to furnish, test, install and maintain a cost-effective, automated License Plate Recognition (LPR) System, including vehicle-mounted LPR equipment, for supporting the City's on-street parking enforcement and permit programs.

Avrio RMS Group (the "Proposer") fully understands the requirements and scope of services identified throughout this RFP.

We propose to provide and install thirty (30) GPS-enabled LPR units on city owned vehicles for lot specific parking enforcement, permit enforcement, scofflaw tracking and time limit enforcement. Our proposal includes all required equipment, materials, installation and software as well as setup and training services to provide a complete system.

The system we propose will be able to actively scan vehicle plates from all angles available to a moving enforcement vehicle and will provide real time alert to the person driving the enforcement vehicle.

We remain very excited by this opportunity. If you have any questions, please call me at anytime on cell or in the office (contact information below).

If you have any questions, I can be reached by cell phone at (410) 310-3006.

DPW Parking LPR System Proposal

City of Milwaukee, WI

Best Regards,



Darrin Lipscomb, President
Avrio RMS Group
3 N. Harrison St., Suite 100
Easton, MD 21601

Office: (410) 820-9334

Fax: (410) 820-9334

dlipscomb@avriormsgroup.com

The information contained in this Submittal or any part thereof is true, accurate, and complete. This Submittal includes all information necessary to ensure that the statements herein do not in whole or in part mislead the City as to any material facts.

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2 Corporate Capabilities

2.1 Profile of lead firm's organization & relevant capabilities

Avrio RMS Group has deployed dozens of similar solutions around the country and has adopted a teaming methodology that ensures success on projects of this scope. Our expert solution managers, wireless field engineers and project managers bring years of real-world expertise working with the specific products proposed. Avrio RMS Group deploys more wireless mesh based video solutions for municipalities than any other company in the country. Some of our larger customers, with projects in excess of \$2 Million and based on similar wireless and video technologies, include Pittsburgh, Denver, St. Paul, Washington D.C., Buffalo, Charleston, and the Cayman Islands. Avrio RMS Group was recently chosen to deploy city-wide wireless video solutions for the City of Atlanta, the 2012 Democratic National Convention in Charlotte, North Carolina and the Royal Bahamian Police Force in Nassau, Bahamas.

Avrio RMS Group has adopted a rigorous vetting process for subcontractors around the country. This includes evaluating past performance, specific low-voltage electrical certifications and licenses, and possessing the right tools and equipment to ensure physical deployment meets high quality standards. Our engineers and managers work hand-in-hand with our subcontractors, directing every facet of the deployment to ensure overall project success.

2.1.1 Name, FEI#, legal form, incorporation state & history

Avrio RMS Group's legal name is Security Solutions Technology Group, LLC. Avrio RMS Group's FEIN is 26-3966298.

Avrio RMS Group was incorporated in the State of Delaware. Corporate headquarters is located at 1359 Barclay Boulevard, Buffalo Grove, IL 60089.

Founded in 1976, Avrio RMS Group began as a custom software developer doing business as RMS Technology Solutions Inc. Over the last several decades we have expanded our focus a number of times to meet the fluid demands of the information technology marketplace and today Avrio RMS Group's experience in software, servers, storage, wired and wireless networking all comes together to serve municipalities and organizations with wide-area surveillance needs.

2.1.2 Corporate size & market concentration in parking technology industry

Avrio RMS Group is approximately a \$20 Million company with focus on law enforcement and public safety systems including wireless, video, LPR and IP-Surveillance solutions. Our LPR solutions are centered on fixed and mobile law and parking enforcement systems. We have deployed close to a dozen of these systems in just this past year.

Avrio RMS Group is part of a group of businesses branded under the trade name Carrick Bend under the overall governance of a Board of Directors.

1. Avrio RMS Group consists of two companies: Avrio Group and RMS Technology Solutions merged under the trade name Avrio RMS Group.
2. Pantascene is a business unit of Avrio RMS Group.

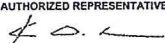
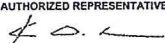
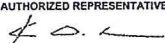
Avrio RMS Group and Pantascene are approximately 70% owned by Generation 3 Capital, LLC and Waveland Investments, LLC and the balance is owned by the original owner/operators.

2.1.3 Fiscal condition & stability (attach most recent audited financial or credit report)

Avrio RMS Group is a privately owned company, well capitalized and stable. Financial information is company confidential. Please see Section 8 for latest audited financial statements.

2.1.4 Insurance & bonding (e.g., carrier, coverage types, liability limits & policy dates)

Below certificate lists our current insurance coverage types and limits.

ACORD®		CERTIFICATE OF LIABILITY INSURANCE		DATE (MM/DD/YYYY) 3/4/2013						
THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.										
IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).										
PRODUCER JMB Insurance Agency 900 N. Michigan Avenue Suite 1500 Chicago IL 60611			CONTACT NAME: Laura O'Malley PHONE (A/C No. Ext.): (312) 915-2200 FAX (A/C No.): (312) 577-0725 E-MAIL ADDRESS: lomalley@jmbins.com							
INSURED RMS Technology Solutions LLC 1359 Barclay Blvd. Buffalo Grove IL 60089			INSURER(S) AFFORDING COVERAGE		NAIC #					
			INSURER A: Federal Insurance Company							
			INSURER B: Great Northern Insurance Company							
			INSURER C: Chubb Indemnity Insurance Company							
			INSURER D:							
			INSURER E:							
INSURER F:										
COVERAGES CERTIFICATE NUMBER: Cert ID 45748 REVISION NUMBER:										
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.										
INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS				
A	<input checked="" type="checkbox"/> GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC		35937994	1/23/2013	1/23/2014	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000				
B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS		73565716	1/23/2013	1/23/2014	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$				
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$		79874282	1/23/2013	1/23/2014	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000 \$				
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in WI) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N/A	71744271	1/23/2013	1/23/2014	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000				
A	Prof. Liab. - Claims Made		35937994	1/23/2013	1/23/2014	Agg. Limit/Bach Claim Limit \$ 2,000,000 \$				
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)										
<table border="1"> <tr> <td>CERTIFICATE HOLDER</td> <td>CANCELLATION</td> </tr> <tr> <td>Evidence of Coverage:</td> <td> SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE  </td> </tr> </table>							CERTIFICATE HOLDER	CANCELLATION	Evidence of Coverage:	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
CERTIFICATE HOLDER	CANCELLATION									
Evidence of Coverage:	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 									

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2.1.5 Relevant organizational experience (attach list of parking LPR System clients)

Listed below are clients currently using Avrio RMS Group LPR systems:

- Company Name: Sommerville, MA/Duncan

- | | | |
|--|-------------------|---|
| | Company Address: | 633 W. Wisconsin Ave Suite 1600, Milwaukee WI 53203 |
| | Company Contact: | Gary Smith |
| | Title of Contact: | Sr. Advisor |
| | Phone Number: | 414-801-2792 |
-
2. Company Name: City of Evanston
 Company Address: 2100 Ridge Ave #1300, Evanston, IL 60201
 Company Contact: Rickey Voss
 Title of Contact: Parking Manager
 Phone Number: 847-448-8292

 - 3 Company Name: University of Maryland Department of Transportation
 Company Address: Bldg 202 Regents Drive, College Park MD 20742
 Company Contact: David Davitaia
 Title of Contact: Associate Director of Transportation
 Phone Number: 301-314-8077

2.1.6 Performance on recent, similar projects (attach 5 client references with contacts)

1. City of Pittsburgh's Ring of Steel Project

Contact:

Gwen Moorer
 (412) 255-2653
 Gwen.Moorer@city.pittsburgh.pa.us
 Project Size: \$4,500,000

2. City of Denver, CO for Democratic National Convention (DNC) 2008

Contact:

Lt. Ernie Martinez
 (720) 913-6856
 Ernest.Martinez@denvergov.org
 Project Size: \$2,000,000

3. City of Saint Paul, MN for Republican National Convention (RNC) 2008

Contact:

Tim Lynaugh
 (651) 665-7563
 Tim.Lynaugh@securian.com
 Project Size: \$4,500,000

4. City of Buffalo, NY Police Department

Contact:

Captain Mark Makowski
 716-851-5643
 mmakowski@bpdny.org
 Project Size: \$3,000,000

5. City of Washington DC

Contact:

Bruce Healey
202-277-1183
bruce.healey@dc.gov
Project Size: \$900,000

2.1.7 Disclosure of any contracts terminated in last 5 years or any pending litigation

None.

2.2 Profile of lead firm's proposed subcontractors (if any)

Avrio RMS Group is partnered with Duncan Solutions who will be trained and able to provide support on the equipment being proposed.

2.2.1 Name, legal form, incorporation state, size & FEI number

Duncan Solutions, Inc

FEIN 39-1956409

Incorporated in the State of California

2.2.2 Proposed role & responsibilities

Provide technical support and project management related to the integration of Milwaukee's "hot lists" to the proposed LPR system.

Future "development" add-on functionality that is mutually agreed to by Genetec, Duncan and the City.

If necessary, Duncan will provide on-site support within the City's 2 hour required timeframe to assist in the resolution of issues where it has been determined that an on-site presence is necessary to resolve the issue.

2.2.3 Relevant organizational experience & capabilities

Duncan provides a wide variety of parking management services, including a complete multi-component parking citation processing system components and collection services for delinquent accounts. Duncan also has the resources and capabilities to provide an integrated handheld citation issuance solution; accurate processing of all DMV transactions; timely production of all correspondence; administration of a Fleet Operator Program; sale and issuance of residential parking permits; maintenance and posting of payments through pay-by-phone and pay-by-web transactions; complete data processing; public interface capability, integration with supplementary enforcement systems (boot/tow operations and LPR systems), and much more.

With our aggregate 25 years of experience processing parking citations and our portfolio of clients processing more than 5 million tickets annually. We are an experienced provider of parking citation processing systems or services to more than 200 user cities nationally, including over 30 cities that require LPR integration for the support of enforcement and permitting programs.

2.2.4 Prior performance for recent, similar work (attach 2 client references with contacts)

Evanston, IL
2100 Ridge Avenue
Evanston, IL 60201
Rick Voss
Parking/Revenue Manager
(847) 448-8292

Montgomery County, MD
100 Edison Park Drive, 4th floor
Gaithersburg, MD
Gene Dombrowski
(240) 777-8739

2.3 Compliance with or commitment to applicable City laws & policies

Avrio RMS Group will comply with all applicable City laws and policies.

2.3.1 Small, woman-owned or minority-owned business participation

We will not utilize small, woman-owned or minority-owned businesses given the nature and specialized type of work required to perform.

2.3.2 Local Business Enterprise (LBE) participation

We will not utilize nor are we a Local Business Enterprise. Our main office is located in Buffalo Grove, IL and is within an hour's drive to downtown Milwaukee.

3 Project Team

Core skills and real-world expertise are critical to ensure the project moves forward and stays on-time and on-budget. Avrio RMS Group staff is certified in all of the major technologies used including ONSSI NetDVMS, Genetec Omnicast Honeywell MaxPro VMS for video management or security management software, AgentVI, Honeywell Video Analytics and ObjectVideo for video intelligence, wireless infrastructure including Firetide, Motorola, Redline, Bridgewave, Proxim and Cisco. In addition, we have certified engineers in enterprise servers and storage systems such as Pivot3, which is critical for the head-end subsystem to operate reliably.

We perform state and federal background checks on all of our staff prior to employment with Avrio RMS Group. Most of our key engineers have been with the firm for 5 or more years and have worked on the same type of system deployments as being proposed for the City of Milwaukee. Unlike many of our competitors, we do not subcontract out any critical portion of the work. We consider the wireless infrastructure, camera subsystems and video management systems all key components. Avrio RMS Group typically forms agreements with local electrical subcontractors to provide electrical work and installation support on all of our projects, which are managed by a single Avrio RMS Group project manager with construction and project management expertise to deliver the project on-time and within budget.

Below are the biographical sketches for the principle engineers and project managers for Avrio RMS Group. Avrio RMS Group employs approximately 35 engineers, consultants and technicians from around the country that are dedicated to delivering quality wireless video solutions for our customers. Below are just some of the key individuals that would be involved in this project.

Project Executive and Avrio RMS Group President, Darrin Lipscomb

After obtaining his bachelor's degree in Mathematics, Mr. Lipscomb was awarded a full scholarship to Brown University in their PhD program. After a year of study, he transferred to Virginia Tech's Systems Engineering program to obtain a master's degree prior to entering industry.

Directly after college, Mr. Lipscomb was selected for a Naval Defense contracting program where he worked as an analyst on the Tomahawk Cruise Missile Program. Subsequently, he consulted with Microsoft Consulting Services in Washington D.C. for several years prior to launching the Technology Solutions Group (TSG) in Richmond, Virginia that focused on providing businesses with customer relationship management solutions.

After growing TSG to a multi-million dollar consulting company, Mr. Lipscomb launched a software company called Pipestream that provided sales and customer service applications to Fortune 500 companies. He sold the company to Remedy in 1998, where he was named Director of Engineering – one of only 12 such positions within a 1200 employee company. At Remedy, Mr. Lipscomb was responsible for architecting their next generation object oriented, web-based platform for their core product group called the Action Request System. Mr. Lipscomb was also the general manager of a web-based personalization company in Dallas, Texas that was incorporated into their base platform.

Mr. Lipscomb was the founder of Avrio Group in 2003 and grew the company to \$10 Million in revenue by 2008. Avrio Group focused on wide-area networks and software interoperability and integration platforms. Majority interest in the company was sold to Generation3 Capital, LLC and Waveland Investments, LLC in 2009 when it was merged with RMS Technology Solutions, Inc. to form the country's largest provider of these solutions for government clients.

LPR Solution Manager, Todd Forman

Mr. Forman brings over 5 years of experience in the LPR and VMS-specific marketplaces. He has over 10 years of experience in designing data networks in a variety of environments including municipal, public safety, parking enforcement and law enforcement including the large fixed-camera LPR system for the City of Chicago.

Recognized industry certifications

- Cisco Sales Certification
- Genetec certified on Security Center, Omnicast and AutoVu

System Architect, Anthony Caputo

Mr. Caputo is the Director of Pre-Sales Engineering at Avrio RMS Group, with six years of hands-on DVS experience and over fifteen years of networking and digital video experience. Mr. Caputo worked as a DVS architect in public transportation, education, retail and municipalities having worked on homeland security projects for the City of Chicago, and New York City. He is the published author of Elsevier/Butterworth-Heinemann's Digital Video Surveillance and Security and McGraw-Hill's Build Your Own Server and has presented at conferences on the importance of a network security plan.

Mr. Caputo also provided the Keynote Speech "The Future of CCTV" and a DVS troubleshooting workshop at CCTV World-2011 Conference in Sydney, Australia in December 2011.

Mr. Caputo is a certified and subject matter expert in a number of technology disciplines, including project management with PMI (PMP), CCNA, CWNA, Genetec Omnicast and Security Center, Firetide Mesh Network Engineer, object-oriented analysis and design for business process improvement, and a Microsoft Certified Professional. He holds a certification as an IBM e-business Solution Advisor, helping IBM write the exam for certification and in encryption and security from the University of Chicago.

Program Manager, Stewart Witt

Mr. Witt is the Program Management Officer for Avrio RMS Group. In this role, Stewart works with customers, engineers, and integrators to realize the project objectives within the time and budget constraints. He has over 20 years of experience leading successful projects and portfolios of projects in a variety of applications such as NASCAR pit stop improvement teams to worldwide organization transformation projects. He earned his Bachelor of Science Organizational Development & Leadership from Purdue University, School of Technology, Department of Supervision and his Associates of Applied Science in Electrical Engineering from the Indiana Vocational Technical College. Stewart has also been certified by the Theory of Constraints International Certification Organization in the area of project management.

Network Engineer, Rob Wargaski

Mr. Wargaski is a solution manager with the Avrio RMS Group and is responsible for the design and deployment of video management systems, their requisite local- and metropolitan-area networks, and customer training. Mr. Wargaski has over 20 years of experience in the IT field including UNIX system administration, software development, internetworking, and IP-based video management systems. He earned a bachelor's degree in Computer Studies from Northwestern University and professional certifications from Cisco, HP, Genetec, and Milestone. He has designed and deployed IP video systems for high-profile customers such as the Cities of Chicago, Indianapolis, Rochester, and Cincinnati. Mr.

Wargaski has been with the Avrio RMS Group since 1998, and has past professional experience with an international bank, a regional medical center, and a money management firm.

Wireless Architect, Charles Byrd

Mr. Byrd is the delivery manager and a wireless systems architect at Avrio RMS Group. He has over 17 years of experience in wired and wireless network design. In this role, Charles works with end-users, integrators, and consultants to design and deploy wireless networks for security and surveillance. Prior to joining Avrio RMS Group, Charles was the U.S. Southeastern Regional manager and systems engineer for Firetide and previously owned an independent networking and security consulting business for 7 years. He has consulted private industry and governments to implement large scale wireless networks for projects including cities of Atlanta, GA, Tampa, FL, Greer, SC, U.S. Naval Smart Grid, and NASCAR with high speed mobility mesh networks. He has functioned as project manager and designer of projects for wired infrastructure and customized wireless network designs in both the U.S. and internationally. Charles holds a bachelor's degree in Physics from the University of Georgia and a M.B.A. in Information Systems from Kennesaw State University.

Systems & Network Engineer, Kirill Sokolinsky

Mr. Sokolinsky is a Systems & Network Engineer with Avrio RMS group. He has extensive experience in design, configuration, and installation of multiple digital video network solutions from small scale (100 camera) systems to airport deployments with over 2200 cameras. Mr. Sokolinsky has a bachelor's degree in Network Technologies from DePaul University and holds Cisco, EMC, Milestone VMS, and ISS VMS certifications. He also possesses an extensive knowledge and experience with VMware solutions. He has designed and implemented virtual DVMS solutions for O'Hare and Midway Airports and designed and implemented smaller scale solutions for American Airlines.

Solutions Manager, Steve Katz

Mr. Katz is a solution manager with Avrio RMS Group and is responsible for the design and deployment of video management systems, their requisite local- and metropolitan-area networks, and customer training. Mr. Katz has over 25 years of experience in the IT field including Active Directory, Email and Security administration, software development, quality of service, disaster recovery, internetworking, IP Telephony and IP-based video management systems. He earned a bachelor's degree in Computer Studies from Colorado State University and professional certifications from Cisco, HP, Genetec. He has designed and deployed IP video systems for high-profile customers such as the Cities of Austin, Washington DC, Newark Delaware, Rochester, and Moreno Valley. Mr. Katz has been with the Avrio RMS Group since 1988.

Deployment Project Manager and Engineer, Bob Tsiskakis

Mr. Tsiskakis is a Deployment Project Manager and Electrical Engineer with Genetec, Inc., based in Saint-Laurent, Quebec, Canada. As a Deployment Project Management, Mr. Tsiskakis is involved with planning and coordination of Genetec's integrators/end-customers installations and integration project activities of complex and large Video and License Plate Reading (LPR) Solution systems. Previously, Mr. Tsiskakis worked with AutoVu Technologies in Montreal, QC as a Deployment Project Manager/Field Engineer for the coordination and installation of all AutoVu LPR products. Mr. Tsiskakis also worked for Invensys and APV Inc., as a Project Engineer and Project Manager for deployment and integration of the solution. Mr. Tsiskakis has a Degree in Electrical Engineering technology from

DPW Parking LPR System Proposal

City of Milwaukee, WI

Malcolm Campbell in Montreal, Quebec, majoring in electro-mechanics, electronics, instrumentation and control.

4 Product Plan

4.1 Overview of LPR system & offerings

AutoVu™ is the IP license plate recognition (LPR) system of the Security Center, Genetec's unified security platform. From your vehicle or office, AutoVu helps you automate the identification of vehicle license plates. Organizations looking to enhance applications in law enforcement, parking enforcement, license plate inventory, security and access control choose AutoVu for the right reasons:

Be Automatically Notified of Vehicles of Interest

All you have to do is focus on your job. AutoVu automatically reads surrounding vehicle plates, compares them to a database and alerts you when you need to take action. This LPR system comes with powerful features to make you even more efficient: use graphical maps for configuration; conduct data-mining in your vehicle or office; and get image and time capture on every license plate read.

Rely on Accurate License Plate Reads

AutoVu is an LPR system you can rely on. With AutoVu, you will catch all license plates in the camera's field of view. AutoVu reads license plates with the highest accuracy rates in the industry. And, thanks to its unique Fuzzy Matching feature, you get the best possible matches to your database even when license plates may be undecipherable. ?

Reduce The Operator Learning Curve with Ease-of-Use

As part of Genetec's unified security platform, AutoVu comes with a very intuitive and user-friendly interface. Operators with any level of computer experience will feel at ease with this LPR system. In the office, drag and drop reads to see an image of the vehicle and its plate. Use graphical maps to review LPR data. And get reports with one click of the mouse. In the vehicle, large buttons and touch-enabled functions make training a breeze.

Obtain Real-Time LPR Information with IP Connectivity

AutoVu is IP-ready. There is no waiting for LPR information. You get real-time monitoring and identification of vehicle plates. The transfer of license plate information from the vehicle to your office is instantaneous. So you can take immediate action if necessary. And you can even configure and manage your LPR system over any IP network.

Take Minimal Time to Get Your System Installed

Getting AutoVu up and running is simple. Once the AutoVu camera is installed, you only need to make minimal adjustments and configuration to get your LPR system going. Databases can be uploaded at each shift or automatically on a pre-set time frame. It's an easy three-step process to LPR automation.

Please refer to the attachment (Genetec AutoVu LPR brochure) for more information.

4.2 System component descriptions

4.2.1 Camera

The AutoVu SharpX is the latest IP-based license plate recognition (LPR) camera by Genetec. It allows law enforcement agencies to quickly identify vehicles of interest with the highest degree of accuracy available. Advanced license plate recognition technology has been touted as a true force multiplier, and for good reasons. Whether an agency is on the lookout for wanted felons, uninsured or prohibited drivers,

or any vehicles of interest, the AutoVu SharpX can scan thousands of vehicles per shift, and alert officers when a suspect's vehicle is within the vicinity.

Please refer to the attachment (Genetec AutoVu Sharp X brochure) for more information.

4.2.2 Mobile LPR processor

Powerful and Scalable Processing – Often a mobile LPR solution includes a trunk unit with a single processor which is divided amongst several cameras. Each AutoVu SharpX system comes with up to 4 dedicated Intel processors, ensuring that individual camera performance will not suffer with the addition of more cameras. A fully equipped vehicle can read up to 5,000 plates per minute.

Please refer to the attachment (Genetec AutoVu Sharp X brochure) for more information.

4.2.3 Back office hardware/software

Hardware – AutoVu SharpX and AutoVu Sharp

The AutoVu Sharp family of IP-based LPR devices leads the industry in license plate read rates, ensuring an effective solution for police operations. The Sharp and SharpX are designed to provide the most accurate plate reads every shift, more plate reads in bad weather, or at poor angles, and even at high speeds. From vehicle mounted systems to fixed perimeter installations, AutoVu enables organizations to automate license plate identification, and share critical data amongst officers.

Software

AutoVu Patroller is the intuitive in-vehicle control interface of the AutoVu system, providing easily accessible features for officers onboard, and allowing them to monitor incoming reads from LPR cameras. With touch-enabled functions, training on the system is easy for operators of all levels of technical experience.

Security Center is Genetec's unified security platform that provides real-time monitoring of AutoVu events, alarm management, as well as advanced data-mining and reporting capabilities. As license plate reads and hits are gathered from patrolling units in the field and from fixed AutoVu Sharp units, information is relayed to Security Center operators. In the case of fixed applications, not only can operators monitor the incoming reads from LPR cameras, but can also view live video that is captured from the Sharp camera.

Please refer to the attachment (Genetec AutoVu IP-Based LPR for Law Enforcement brochure) for more information.

4.2.4 Other (e.g., licensing restrictions if any)

Not applicable.

4.3 Explanation of how LPR system will fulfill or exceed City's key operational needs

The LPR system that is being proposed by Avrio RMS Group will optimize the effectiveness of the on-street parking enforcement program and deployment of parking enforcement resources for all violations (including restricted time zone violations). The system will improve the efficiency of the on-street parking permit program and ensure superb customer service for all residents seeking on-street parking permits. The system will also allow the city to go permit-less, if they should desire. This will allow the city to see in an instant savings from allowing the resident to use their license plate as their permit,

allowing the city to see savings from printing and mailing of the physical permit. The system also allows the ability of the police department to use the system with covert hotlists. The back office will also allow the police department to data mine the plates that have been read either by time, date or geographic area. The system will allow the city to strengthen the overall public parking system for its customers, including strengthening the Parking Fund performance.

4.3.1 Parking enforcement (e.g., time restriction violations).

As an advanced vehicle-mounted LPR solution, AutoVu facilitates university permit and time-limited parking enforcement by automatically collecting license plates, comparing them against selected databases and alerting users of vehicles in violation. With a built-in back-office software, universities are also able to better manage various campus parking facilities and their respective restrictions, by further analyzing collected data after each shift. Developed with innovative features and state-of-the-art technology, AutoVu is a comprehensive and easy-to-use LPR solution that universities can leverage for an assortment of applications and benefits.

Please refer to the attachment (Genetec AutoVu for University Campuses brochure) for more information.

4.3.2 Parking scofflaw & suspect vehicle identification

As an advanced vehicle-mounted LPR solution, AutoVu facilitates municipal parking enforcement by automatically collecting license plates, comparing them against selected databases and alerting users of vehicles in violation. With built-in back-office software, municipalities are also able to collect data that can be used as evidence in case of ticket disputes, as well as better manage time-limit and permit zones. Developed with innovative features and state-of-the-art technology, AutoVu is a comprehensive and easy-to-use LPR solution that can be leveraged for an assortment of benefits, contributing to effective parking enforcement.

Please refer to the attachment (Genetec AutoVu for Municipal Parking Enforcement brochure) for more information.

4.3.3 On-street parking permitting & permit enforcement

Parking Enforcement

Checking permits and tire-chalking manually is overly time-consuming. Operators can mount the AutoVu camera on a vehicle, and automate city or university parking enforcement for many types of permits and time limit zones at once. Operators will become more efficient at covering vast areas, and AutoVu will help improve the collection of unpaid vehicle infractions.

Please refer to the attachment (Genetec AutoVu LPR brochure) for more information.

4.4 Any exceptions to requirements outlined in RFP

Avrio RMS Group, with the solution provided, does not have any exceptions to the requirements outlined in the RFP.

5 Service Plan

5.1 Overview of project phases, milestones & schedule

5.1.1 Project Duration and Implementation Approach

We plan to implement the first system by August 15th and all subsequent systems in approximately three (3) months from contract award.

After the PO is received, we expect to spend 2 weeks refining the design and working with the City to ensure the design fully meets their needs.

After the completion of the design we will begin two steps in parallel, first work with the City to determine a final list of equipment. Simultaneously, we will begin ordering, and then assembling the equipment.

The software (Security Center) will be installed and configured on City supplied hardware, so that integration work may begin immediately. Roughly two weeks after staging of the cameras begin, we can begin installing the units and bringing them online in the Video Management System (VMS).

Testing will run in parallel with installation.

As we near the end of the installation, we will begin acceptance testing, user training, and preparation for Final Acceptance.

5.2 Description of acquisition & delivery phase

See 5.1.1 above Implementation Approach.

5.3 Description of implementation phase

5.3.1 Vendor's Methodology

A Project Manager will be assigned immediately upon notification that we have been selected for the project, whose responsibility will be to inform the City of project status, to work with the City on the implementation.

A Project Engineer will be assigned to the project, whose responsibility will be to oversee the technical implementation, any subcontractors, and to work with the Project Manager and the City's technical staff.

5.3.2 Project Organization

We will assign a Project Manager who will be responsible for the overall organization of the project and communications with the City.

We will also assign a Project Engineer who will oversee the technical aspects of the project, including technical supervision of our technicians and subcontractors.

Additional resources, such as trainers, will be used as required.

5.3.3 Project Toolsets

Our project management team uses Microsoft Project for project scheduling.

5.3.4 Technical Support

We provide a fully staffed 24/7/365 support desk to assist with any problems, including remote diagnostics and the ability to dispatch a local resource.

5.3.5 Change Management

Product updates are scheduled quarterly.

5.3.6 Product Reporting

We will work with the City to develop a reporting interface into the system that best fulfills the need. Since Genetec Security Center is SQL based, the City may elect to use its built in reporting capability or the Proposer can develop a customized interface to extract data from the Genetic SQL.

5.3.7 Product Documentation

Full as-built documentation is provided, including IP addresses, serial number, mac addresses, and system design diagrams. Additionally, a full set of product manuals and the equipment manufacturer's training guide will be provided.

5.3.8 Initial Product Training

At project initiation, one-half (1/2) day of formal training will be scheduled for all selected City staff to introduce them to the products we will be using and to provide sufficient familiarity with the products to enable them to work with them.

5.3.9 Product Interfaces

We will test the interfaces between our products and any external systems they interact with. Currently, the system allows the city to interface with the following, but not limited to; Duncan Solutions, Digital Payment Systems and Park Mobile.

5.3.10 Quality Control and Assurance

Avrio RMS Group will incorporate a Quality Assurance (QA) plan to provide more structured and more detailed plans for assuring that the planning, requirements gathering and structuring, along with the design, construction, testing and deployment of the product fulfill the goals and objectives of the project sponsor and business owners. The plan is meant to provide outside eyes into the project and product development process.

The QA process is established to provide objective perspectives on the project to overcome the typical project team's intense involvement that causes them to overlook aspects that seem to appear obvious to an outside observer. This is part of human nature and does not reflect any fault or aspersions about the professionalism of the project team and technical experts.

All project activity is required to include QA activities as an integral part of processes used for the development and delivery of products/services. The policy supports:

- QA goals must be rational to be accepted and supported.
- Continual improvement effort must be supported.

- All quality control and quality measurement activities are documented.
- A manager or management team will be designated to be responsible for Quality Assurance.
- The Project Manager and the Project Sponsor/Business Owners will review Quality Assurance activities.
- This project Quality Assurance Plan will be baselined and placed under Configuration Management control.

Quality Assurance will work to foster constructive communication, provide feedback to detect and prevent development problems, control risks, discuss alternative solutions, and ensure quality is built-in to all products/services

The scope of the project QA plan covers the project activities and product development phases to meet the business objectives established by the project sponsors and business owners. This includes but is not restricted to the following QA topics:

- Organizational structure
- Documentation required
- Procedures to be enforced
- Audits and reviews to be conducted
- Process improvement
- Problem reporting and resolution
- Quality Assurance metrics

5.3.11 System Testing

System testing is a multi-step process, with each step testing a larger scope or more complex function.

- (1) Each LPR unit is pre-configured and tested at assembly time in our shops.
- (2) Each LPR unit is given an initial, basic configuration and operational test when it is installed and connected to the system.
- (3) The overall system is given an end-to-end test before the customer acceptance testing begins.
- (4) Customer acceptance testing.

5.3.12 End User Training

We will provide one (1) day of end-user training on the operation of the LPR system and one (1) day on mobile units.

5.3.13 Acceptance Test

We will develop acceptance tests with the City to ensure that the system meets the specifications.

5.3.14 Final System Acceptance

Avrio-RMS Group will assist the system in Final Acceptance Testing.

5.3.15 Production Cut-over Plan

After the training step, we will cut the entire system over to production simultaneously.

5.4 Description of maintenance phase

5.4.1 Warranty, Maintenance and Support

The following standard warranty is included for the LPR systems:

Length:	1 Year
Product Return and Repair:	Included
<u>Advanced Replacement:</u>	Included within 90 days of purchase
Unit Repair Turnaround Time:	<u>10 business days</u> between receipt by Genetec
Functional Product Return:	<u>Service charge</u> for returned product with no defect found

5.4.2 Post Implementation Support

Avrio RMS Group includes a standard 1-year parts and labor warranty on the complete system beginning at system acceptance. In addition, we will provide both level-1 and level-2 support based on customer-defined SLAs. We offer 24x7x365 support through our help desk and use local technicians to provide superior support to the City of Milwaukee.

Avrio RMS Group is including pricing for 1 year of maintenance, which covers the following:

- M-F 8AM to 5PM CST (4 hour response)
- Onsite, critical spares inventory
- Multiple support options
 - Phone: 877-899-9334
 - E-mail: support@avriogroup.com
 - Text to be determined (local contact)
 - www.avriormsgroup.com
- Case tracking and escalation
- Remote management (desktop, server, vehicle equipment)
- Firmware/patch management
- Hardware replacement
- Field dispatch
- Quarterly training

6 Costs

6.1 Proposed cost elements, i.e.

6.1.1 Acquisition costs

PART	PART DESCRIPTION	PART #	QUANTITY	PRICE	EXTENDED
University Kit	AutoVu SharpX UNIVERSITY Dual base KIT includes main processing unit, hard mount brackets, wiring, GPS antenna, high resolution LPR units and in-vehicle license.	AU-K-U2X-850	30	\$16,293.00	\$488,790.00
Security Center	GSC AutoVu Standard Base Package. Works with Genetec Security Center (sold separately) SQL 2008 Express Edition included. Full Microsoft SQL Server 2008 package not included. Camera connection NOT included	GSC-Av-S	1	\$559.69	\$559.69
Mapping - In-Vehicle	Vehicle Mapping Software Module	AU-M-USCNTY	30	\$8,437.50	\$253,125.00
Handheld Interface	Enhanced Patroller Context Package (PBP, XML Export and Plate Copy).	GSC-CUSTOM-PBPLUS	1	\$562.50	\$562.50
				TOTAL	\$743,037.19

6.1.2 Implementation costs

PART	PART DESCRIPTION	PART #	QUANTITY	PRICE	EXTENDED
Installation & Training	AutoVu Mobile City or University system onsite turn-key installation for 1 vehicle. All inclusive installation services (travel and living expenses included). - Security Center and Operator training (train the trainer approach) max. of 3 participants. - Permit zone configuration included up to 60 zones (City). - Lot configuration included up to 50 lots	PS-F-1AMCOU-NA	1	\$4,500.00	\$4,500.00

	(University). - No wheel imaging camera installation included. - Installation occurs during normal business hours.				
Physical Installation	Physical Installation Services	AV-INSTALL-1UNIT	30	\$1,000.00	\$30,000.00
Zone Configuration	Custom development for University Package (ex: Zone editor, mapping, custom enforcement rules). Up to 50 lots	PS-F-50UNIV-ALL	1	\$562.50	\$562.50
Bank 20 FE Days	Bank of 20 Field Engineering days (25% discount already applied). Minimum of 4 budgetary airfare must be quoted.	PS-F-20FIELDBANK-ALL	1	\$22,500.00	\$22,500.00
				TOTAL	\$57,562.50

6.1.3 Service costs

PART	PART DESCRIPTION	PART #	QUANTITY	PRICE	EXTENDED
Warranty Upgrade	Advanced swap warranty service upgrade from return and repair for first year of sale for SharpX system	AU-K-X-EWUP-1Y1	30	\$393.75	\$11,812.50
SMA Plus	Software Maintenance Agreement 1 YR	SMA-PLUS	1	\$16,250.00	\$16,250.00
SMA Cameras	SMA for 1 AutoVu Sharp – 1 year [2 connections(s) x 1 year]	SMA-SHP-1Y	2	\$67.44	\$134.88
				TOTAL	\$28,197.38

6.2 Proposed costing alternatives (e.g. system update pricing scheme)

PART	PART DESCRIPTION	PART #	Quantity	EXTENDED
Navigation Box	AutoVu Navigator Kit with GPS antenna and USB cable	AU-K-NAVBOX	30	\$17,550.00

Low Temperature	Low temperature option per camera (-4°F to -40°F or -20° C to -40°C) (Sharp XGA and Sharp X VGA and XGA only)	AU-H-FREEZE	30	\$6,750.00
In-Vehicle PC	Panasonic Toughbook CF19 Dual Mode Notebook Complete Kit; 3 year warranty on the laptop Laptop, Mounting Hardware (VEHICLE MAKE AND MODEL MANDATORY AT TIME OF ORDER), Docking Station, and Vehicle Power Adapter. Includes: AU-HPANADKST18, AU-H-PANAPWS12V, A	AU-K-PANACF19DUAL	30	\$180,000.00

\$ 6 K

6.3 Disclosure of key payment terms & pricing assumptions underlying proposed costs

50% OF TOTAL CONTRACT PRICE DUE UPON EQUIPMENT DELIVERY. BALANCE DUE UPON SYSTEM ACCEPTANCE

NO

6.4 Any exceptions to contract principles outlined in RFP

Avrio RMS Group has no exceptions to the contract.

7 Exhibit C Attachments

Exhibit C Non-Collusions Affidavit and Local Business Enterprise Compliance Affidavit Forms are included in this section.

[These forms must be submitted with your proposal]

Bill Vranek

, being first duly sworn, deposes and says that:

(1) He/she is Officer of

Avrio RMS Group

(owner, partner, officer, representative or agent)

(name of organization)

the proposer that has submitted the attached proposal;

(2) He/she is fully informed as to the preparation and contents of the attached proposal and of all pertinent circumstances respecting such proposal;

(3) Such proposal is genuine and is not a collusive or sham proposal;

(4) Neither the said proposer, nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly with any other proposer, firm, or person to submit a collusive or sham proposal in connection with the Contract for which the attached proposal has been submitted or to refrain from proposing in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other proposer, firm, or person to fix the price or prices in the attached proposal or of any other proposer, or to fix any overhead, profit, or cost element of the proposal price or the proposal price of any other proposer, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against the Commissioner of Public Works or any person interested in the proposed Contract; and

(5) The price or prices quoted in the attached proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the proposer or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

Bà Tran

[Signature of Affiant]

(Check One):

_____ Affiant if the proposer is an individual;

_____ Partner if the proposer is a partnership;

X	Officer if the proposer is a corporation.
---	---

NOTARIZATION: Subscribed and sworn to before me this

30th day of April, 2013.

Ann Garich

[Notary Signature]

My commission expires _____, 20____.



Exhibit C – City-Required Submittal Forms
Local Business Enterprise (LBE) Compliance Affidavit
[These forms must be submitted with your proposal]

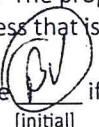
Company Name: Avrio RMS Group is not compliant with this form.

Address: Avrio RMS Group has a local office at 1359 Barclay Blvd.,

City/State/Zip: Buffalo Grove, IL 60089, one hour south of Milwaukee.

This affidavit of compliance will be the proposer's sworn statement that its business meets the following criteria:

1. The business owns or leases property within the geographical boundaries of the City of Milwaukee (the City). Post office boxes shall not suffice to establish status as a Local Business Enterprise (LBE).
 2. A residential address may suffice to establish compliance as a LBE, but only if the business does not own or lease other real property, either within or outside the City's geographical boundaries.
 3. Leased property shall not suffice to establish compliance as a LBE unless at least half of the acreage of all the real property owned or leased by the business is located within the City's geographical boundaries.
 4. The business has owned or leased real property within the City's geographical boundaries and the business has been doing business in the City for at least one (1) year.
 5. The business is not delinquent in the payment of any local taxes, charges or fees, or the business has entered into an agreement to pay any delinquency and is abiding by the terms of the agreement.
 6. The business will perform at least 10% of the monetary value of the work required under the contract.
- Site visits: The proposer agrees to allow the City to verify LBE status by allowing City staff to visit the operations of the business that is seeking LBE status at any time without notice.

Initial here  if any of the above criteria are not satisfied (and return form without signature below).
[initial]

If the above criteria are satisfied, provide data below for property owned or leased in the City of Milwaukee.

Property Name	Own	Lease	Property Street Address	Zip Code

I hereby declare compliance with the City of Milwaukee Code of Ordinances Chapter 365.

Authorized signature: NA Date: _____

Printed name: _____

NOTARIZATION: Subscribed and sworn to before me this

_____ day of _____, 20_____.

[Notary Signature]

My commission expires _____, 20_____.

9 Exceptions to Exhibit B

Avrio RMS Group will comply with all Exhibit B City Requirements for LPR System except for the Partially Compliant (PC) items identified in the attached Compliance Matrix Template.

10 Compliance Matrix

The following attachment is the functional requirements compliance matrix.

Compliance Matrix

Legend:
C = Compliant
PC = Partially
Compliant
N = Non-compliant

Section	Sub Section	Description	Compliant / Non-Compliant	Questions to ask	Internal Comments
1A – Operational (license plate scanning & recognition)					
	1. Scanning	Convenient method for PEOs to scan & digitize photos of LPS & parked vehicles Sophisticated software & technology for finding LPS & enhancing LP images Real-time capture of alphanumeric, date/time, site, image & other required LP/vehicle data	C		
		Ability to capture parked vehicle LPS from all jurisdictions & other vehicle data (e.g., color image, GPS coordinates & scan date/time stamps) at all times whether PEO vehicle stopped or moving & regardless of parked vehicle position (e.g., parallel or angle-parked)	C		The system will be optimized for the plates where the system is installed. You will not have the same accuracy on plates of other Jurisdictions.
		Full accommodation of state/nation LP design variances (e.g., fonts, colors, position & gaps)	C		The system will be optimized for the plates where the system is installed. You will not have the same accuracy on plates of other states.
	2. Reading & recognition	LP data capture rates of at least 98% (of scanned vehicles) even in adverse conditions	PC		The accuracy of LPR is hard to define only if all variables are perfect will any LPR system achieve such high accuracy
		Real-time on-site processing of captured LP data (with remote processing option)	C		LP can be processed in the vehicle but the information can also be sent live to the server where more processing can be done
		Robust algorithms to ensure high resolution & accurate reads (e.g., LP localization, orientation & sizing, image normalization, character segmentation, OCR, syntax analysis & geo-analysis)	C		Our OCR algorithms are robust and our LPR cameras are high resolution
		Robust image manipulation & OCR techniques to ensure high resolution & accurate reads	C		Our LPR camera will extract only the plate from the image and analyze it.
		Superb recognition at varying speeds, angles (e.g., up to 60°) & distance (e.g., 4" - 6')	C		This is dependant on many factors such as speed, angles, distance. Our cameras can read between 7' and 21' away in a variety of angles which cover parallel parked vehicles, 45 degree parking and 90 degree parking.
		Detection of LPS from multiple formats & jurisdictions (e.g., all reflective & non-reflective LPS)	C		The system will be optimized for the plates where the system is installed. You will not have the same accuracy on plates of other states.
		Superb LP resolution & recognition accuracy rates of at least 90% in any conditions (e.g., glare, ambient light, inclement weather)	C		there are many variables to consider when calculating accuracy, if all variables are perfect, we can meet and exceed the spec.
		Real-time processing of parking data from citation processing system	C		The existing back end parking system of permit and scollaw data will update our LPR system real-time.
		Real-time transfer of accurate LP data to citation processing system	C		
		Real-time ability to match LP numbers of parked vehicles against pre-loaded database	C		The database will need to be imported in SC. This could be in the form of a text file. All plates can be matched against this file.
		Compliance with National ACPO ANPR Standards (NAAS) for data capture & accuracy	PC		To the extent possible, we comply with NAAS standardisations.
1B – Operational (parking enforcement)					

Section	Sub Section	Description	Compliant / Non-Compliant	Questions to ask	Internal Comments
	1). Time violations	Ability to distinguish different parking zones & time periods (e.g., 30, 90 & 120 minutes)	C		The system will not automatically tell you which zone you are in but you can configure all these zones in the system and select the appropriate zone to enforce.
		Full support of citations for all time zone restrictions (e.g., 15 minutes, 1 hour or 2 hours)	C		The system will not automatically tell you which zone you are in but you can configure all these zones in the system and select the appropriate zone to enforce.
		Full support of automatic chalking mode (e.g., images for marking time & vehicle movement)	C		Our system can be configured with different time restrictions and will digitally chalk vehicles to enforce.
		Ability to note precise location of time limit violation via flexible method (e.g., GPS or zone)	C		Violations are marked with GPS location and enforcement zone.
		Display of violation evidence (e.g., map, vehicle position, wheels, read times & elapsed times)	C		The violation contains the enforcement zone, map location, time stamps, elapsed time, overview image
	2). Other parking violations	Full support of citations for other parking violations (including pay-by-space violations)	C		Based on current back end processing providing updated lists of data. Pay by space violations can be monitored
		Full integration with citation processing system	C		We have current integration with Duncan however minor modifications may be required.
		Full field capabilities for PEOs to query citation processing system & verify violations	C		Based on current vendor providing updated information
		Ability to enforce all metered spaces (single-space or multi-space parking meters)	PC		If the meters are pay-by-plate, we can use our integration with PBP to do LPR enforcement.
	3). Scofflaw identification	Automatic import/storage of all parking scofflaw data from citation processing system	C		Our system can import text files, CSV or excel documents to use as a hollist in the LPR system
		Real-time access to & real-time wireless retrieval of all parking scofflaw data (e.g., LP data)	C		The system comes with 5 concurrent connections. Any networked PC can access to server data including scofflaw data.
		Automatic identification of scofflaws by matching LP numbers against scofflaw database	C		Our system can import text files, CSV or excel documents to use as a hollist in the LPR system
		Full field capabilities for PEOs to query citation processing system & verify scofflaw match	C		Based on current vendor providing updated information
	4). Optional needs	Automatic population of correct TID data fields for any violation (LPR transfers data to TIDs)	C		System has capability to export data to TID's system
		Ability to support subsequent citation issuance by mail in lieu of affixing citation to vehicle (LPR system transfers violation-related LP images & data to citation processing system)	C		System has capability to export data
		Ability to equip other City vehicles to support parking enforcement (e.g., sanitation trucks)	C		If other vehicles need to have LPR, we would need to add additional hardware and software
1C - Operational (parking permitting)					
	Sales	Full integration with parking permit sales process at all City-approved centers, including MPD kiosks, violation bureaus, Tow Lot & automated payment centers	C		Our system is setup to receive permits from Duncan's back end system
		Automatic import/storage of all parking permit data sold manually & electronically	C		The LPR systems looks for a text file which contains the permit information. When any changes are made to the file, the DB is updated.
	2). Zone management	Automatic recognition of all permit zones (e.g., commuter-impacted & RPP permit zones)	C		Our system is configured with the appropriate permit zones. If a university system is purchased, the zone is recognized and placed at the top of the list.
		Ongoing maintenance of all required permit zone data (e.g., street & address data)	C		All modifications to the zones can be done in the back-end software
		Real-time access to permit zone database & updates (e.g., for inquiries)	C		
	3). Account management	Automatic recognition of all permit account data (e.g., name, number, address, vehicle & LP)	C		The LPR system will link all the LPR reads to the data that is in the permit text file for that license plate
		Seamless interface with permit account database & citation processing system	C		
		Real-time access to permit account database & updates (e.g., for LP/permit inquiries)	C		All permit information is store in a text file and the backend software can query that specific file.
		Convenient scanning of LP data for matching against Permit Database (Invalid Permit List)	C		The system will push permit data to the LPR system and when a plate is not on the list, an alarm is raised. This can be a manual plate entry or an automated plate read
	4). Enforcement				

Section	Sub Section	Description	Compliant / Non-Compliant	Questions to ask	Internal Comments
1E – Operational (other system requirements)		Automatic detection of permit violators by matching against Permit Database (Invalid Permit List)			The system will push permit data to the LPR system and when a plate is not on the list, an alarm is raised. This can be a manual plate entry or an automated plate read
		Real-time alerts for PEOs of LPR-captured LPs without valid parking permit	C		
			C		
		Ability to simultaneously enforce permits, permit zones & permit regulations (including odd/even & day-of-week parking & other regulations (e.g., time restrictions)			The system will be set up with the different parking permits and time limit enforcement rules and the officer will have to select which permit to enforce and if he also wants to do time limit on vehicles who don't have a permit the officer will select a time limit to enforce.
	5). Optional needs	Seamless integration with MPD database			
		Ability to read, recognize & enforce disabled parking permits	C		Our system can export our data in XML format and can also import hotlists in CSV, text or excel file
			C		If it is just adding different number plates in the permit list then we will treat these as normal permits
	1) Data management	Real-time access to MPD stolen vehicle database (Suspect Vehicle List) wireless or via file exchange			If the MPD database information is in a textfile or CSV file available on the server, we can do realtime searches on that database.
		Storage (with real-time access) of all City-furnished suspect vehicle data (Suspect Vehicle List)	C		All the hits will be stored in a database which can be accessed with Security Center until the retention period is reached.
		Accurate maintenance of suspect vehicle data for at least 365 days			
		Access to other relevant data for supporting criminal justice investigations (e.g., witness identification, pattern recognition or suspect individual tracking)	C		All the hits will be stored in a database which can be accessed with Security Center until the retention period is reached.
	2) Scanning	Ability to scan LPs of suspect vehicles while simultaneously identifying parking violations			
		Automatic, real-time detection of suspect vehicles by type via LP/database match	C		Our system can monitor for parking violations as well as hotlist infractions
			C		You can have different hotlists for different types of hits and you will get different alerts for each hotlist
1F – Operational (other system requirements)		Automatic, real-time alerts for detected suspect vehicles (with digital documentation)			
	3). Optional needs	Mechanism for accessing NCIC database downloads & other relevant databases	C		You can have different hotlists for different types of hits and you will get different alerts for each hotlist. All information stored in the hotlist will be shown on screen
		Real-time access to daily updated NCIC criminal data from all cities	C		
		Full compatibility & seamless interface between MPD & DW systems (as requested by MPD)	C		
		Integration of identifying driver data (e.g., photo) for supporting MPD law enforcement strategies	C		Based on information coming in a industry standard format (XML, FTP, CSV)
	1). Hardware & equipment	Compact design (e.g., compact weatherproof housing for camera, illuminator & processor)			We are able to take in drivers information. Photo inclusion will require minor development
		Rugged, infrared mobile cameras mountable on vehicles with requisite camera shutter speed & lens configurations to enable plate reads from multiple distances & angles	C		See SharpX Specs
		Small, durable processors housed easily in vehicles & seamlessly linking OCR technology	C		See SharpX Specs
		High-capacity battery & flexible power options (e.g., solar & DC in-vehicle adaptor)	C		Our system will operate off multiple power sources
		Full redundancy (e.g., power, fiber connectivity & disk arrays)	C		Our application can run in a virtual environment with the version specified in the system requirements.
		High manufacturing standards (e.g., compliance with ISO 9001:2000 standards)	C		See certification sheets
	2). Software & interfaces	Requisite integration of LPR system with TIDs to ensure efficient field use of LPR technology & automatic population of appropriate citation fields in TIDs			
		Full, real-time data access & integration with citation processing system & parking databases	C		
		Open architecture & feasible communications for facilitating integration with other applications	C		We have current integration with Duncan however minor modifications may be required
		Compatibility with Windows operating system & Internet Explorer 7.0 or later browser	C		See system requirements
		Automatic data conversion to key Windows-based programs (e.g., Word & Excel)	C		Our reports can be exported in Excel or PDF format.
		Accreditation of software for Web-based services	PC		We offer software for web based services
		Full integration capabilities with relevant smart/cell phone apps	C		We can export all LPR data in XML format and in can be brought in any 3rd party system

Section	Sub Section	Description	Compliant / Non-Compliant	Questions to ask	Internal Comments
		Requisite flexibility & scalability to meet long-term needs (including field upgradeability)	C		Genetec is the leading manufacturer for LPR in parking enforcement and we offer the best feature set and scalability
		Adequate security controls for protecting LPR data from unauthorized access (e.g., firewall, password controls, PCI/HIPAA compliance & data communications encryption)	C		For LPR, the environment will be secure and the security level is extremely granular but the payment part of it will be the responsibility of the citation company.
	3). Data management	Automatic uploads of synchronized time zone, parking violation, scofflaw, parking permit & suspect vehicle data from citation processing system to LPR units	C		when any of the text files we point to are modified, there will be an update in the vehicle with the new information. This is done in almost real time if there is a live connection in the car.
		Prompt storage of captured images & data	C		The LPR data is stored in real time on the laptop and when there is a connection to the server, the information is pushed to the server.
		Sufficient storage capacity for parking enforcement, permitting & suspect vehicle program needs	C		This will be in function of the available disk space available on the database server
		Flexibility to transfer images & other data to remote PC for subsequent processing & retrieval	C		All information is stored in a central database. You can use a webclient if you wish to access the database without having access to the network.
		Good database formatting flexibility (e.g., customize screens & alarms based on system hits)	C		Security Center is highly customizable. For reports, you can determine which columns to show; for the GUI, you can determine which panels to hide, and for security you can force users to see only specific tasks.
		Continuous back-ups to archived data to ensure no loss of vital data	C		Backing up information will be the responsibility of the city but our database will keep the information as long as the customer wants or as long as there is disk space.
		Database management by qualified entity (e.g., ISO 9001:2008 & Microsoft Gold certification).	C		Genetec is a Microsoft Gold Partner
	4). Data analysis & reporting	Comprehensive daily, weekly, month & yearly permit program reports	C		We offer read and hit reports which can be filtered with an absolute time or relative time
		Comprehensive daily, weekly, month & yearly parking enforcement reports on full spectrum of enforcement data (e.g., violations by type, street & PEO)	C		We offer read and hit reports which can be filtered with an absolute time or relative time. All hits will have information associated to it.
		Generation of all other management reports in format required by City, including ad hoc & customizable reports requested by City (e.g., LPRs captured/ read, photos & system usage)	C		We have many reports available (see report PDF) and we can export those report in Excel or PDF.
		Mapping feature for displaying geo-coded enforcement, permitting & suspect vehicle patterns & tracking discrete LP locations, multiple vehicle activity & violations by area using LPR data (attach geo-coded digital file to citation, permit or suspect vehicle)	C		Our LPR system is equipped with a GPS. All reads, hits and violations are associated to GPS coordinates. From there, we can plot the events on a map and do filters by geographical area.
		Real-time display of every LPR-issued citation issued from TIDs & all other collected data (e.g., scofflaws, suspect vehicles, violations, wheel images for time zones & route & system usage data)	C		if there is a live connection in the vehicle to the server, all information for reads/hits will be seen live
		Provision of all management reports in frequency & manner required by City	C		Reports can be generated at the users discretion
		Automatic alerts to back office when LPR system inactive or off	C		If the system has a live connection to the server, the vehicle icon will become red to indicate that the LPR system is offline.
	5). Optional needs	Ability to import all City-required national & regional databases (public safety interface)	C		We can take any CSV or text file to import it into our system
		Ability to cross-reference driver ID data with LP database	PC		We can add a driver ID to hotlist and display it on hits
		Ability to handle multiple video inputs from color cameras	PC		Security Center is also a VMS, if IP cameras are plugged into the network and are supported by Genetec, you can have the video in Security Center
		Ability to manually correct previously incorrectly-read LP data	C		When plates are not well read, you can type in the correct plate
		Flexibility to transfer data in real time via SIM card or batch process upload/download	C		If there is a live connection we can transfer real time. If not, we will transfer when there is a connection to the server
		Ability to attach photo of captured LP image to citation issued to violator	C		XML file sent from Patroller to existing handheld that includes LP image
		Ability to add notes to images captured by system	C		Software has ability to add additional information with the image

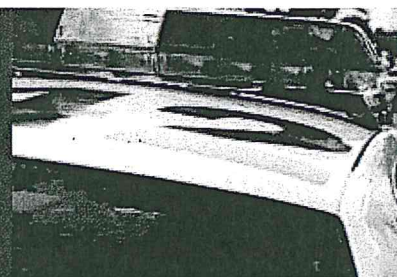
Section	Sub Section	Description	Compliant / Non-Compliant	Questions to ask	Internal Comments
2 – Implementation requirements		Ability to record, track & display actual PEO routes during assigned shifts	C		The LPR system can be tracked on a map and you can have a route playback of where the vehicle has been and where it got hits/reads
	1). Installation	Flexible installation options especially for vehicle-mounted components Proper positioning of vehicle cameras (e.g., optimum proximity of camera for good LPR reads) Simple, easy system/equipment installation & deployment	C		Our cameras can be bolted on to the roof, they can be mounted on a light bar, they can clip on to the lid of the trunk or simply be installed with magnets. The processing unit can be placed in the trunk or under a seat. Power can be supplied by the cigarette lighter or a direct connection to the battery.
	2). Testing	Rigorous testing protocol to ensure full system operability by first day of permit sales	C		
	3). Training	Simple, easy & quick operability (e.g., easy-to-use software interfaces) At least three one-hour on-site classroom training sessions (one for each shift) One online training manual/guide for all employees At least ten (10) hard copies of training manual/guide for leads & other designated employees	C		
			C		
			C		
			C		
			C		
			C		
			C		
3 – Service requirements	1). Service	At least 99.9% uptime for all system components Full warranty coverage for first 12 months of operation Remote technical assistance access with 24/7 customer service line	PC C C		99.9% uptime on our back end can be achieved utilizing existing hardware, software and network redundancy SMA Plus needs to be purchased
	2). Maintenance	Local service capabilities for ensuring timely repairs or replacement 24x7 customer service/technical support telephone line for customer inquiries & troubleshooting	C C		Duncan for 2 hr. turnaround SMA Plus
	3). Updates	Commitment to providing all system updates to city in a timely fashion Contractual mechanism for modifying system to meet City's dynamic needs	C		

11 Product Data Sheets

The following data sheets pertain to the proposed products and solutions in this response.

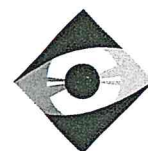


AutoVu for Law Enforcement



IP-Based License Plate Recognition (LPR)

As an advanced LPR solution, AutoVu facilitates specific law enforcement tasks by automating the verification of license plates for routine patrols, specialized operations or task forces. AutoVu automatically collects license plates, compares them against selected databases and alerts officers of vehicles of interest, making this mobile LPR solution ideal for applications such as wanted vehicle and felon identification, data mining and information gathering. With comprehensive back-office software, law enforcement agencies are also able to collect and review system usage, route playback data, and generate detailed reports which can all be used for investigation purposes.



AUTOVU

AutoVu Applications for Law Enforcement



Wanted vehicle and felon identification – One or multiple lists of wanted vehicles (such as warranted felons, stolen vehicles, amber alerts, uninsured vehicles, revoked licenses, etc.) are either uploaded at the beginning of the shift to the

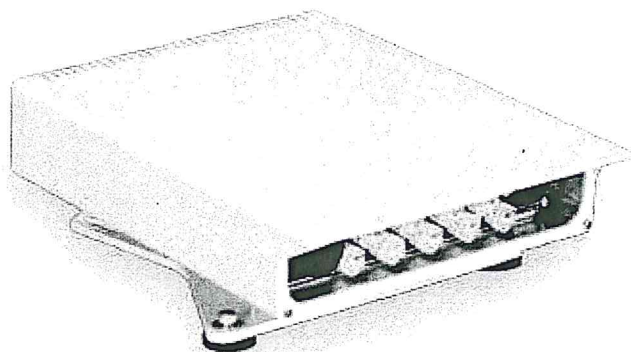
in-vehicle system, or automatically and wirelessly downloaded throughout the shift, depending upon the wireless transfer capabilities that are available.

As officers are out on patrol, the AutoVu system will automatically read license plates of every passing car up to differential speeds of 145 MPH (225 km/h), spanning up to two lanes of traffic on either side, or vehicles parked in parallel or at 45 and 90 degree angles. If a plate read matches a wanted vehicle record, AutoVu will automatically alert officers via an audible alarm while displaying a color image of the identified vehicle, its license plate, and the categories of interest that are relevant to the vehicle in question.

In-vehicle data-mining – For the purpose of reviewing collected reads or tracking specific vehicles at any given time, such as new vehicles of interest received by radio, officers can search license plate reads and determine the date, time and location of the sighting from the in-vehicle system. Officers can base their searches on either a complete or partial license plate number. All matched records are then displayed for review by the officer.

How Will Your Police Department Benefit from AutoVu?

- Automate the verification of vehicle license plates against wanted vehicle or revoked license databases.
- Improve the recovery rate of stolen and wanted vehicles and apprehend more suspects.
- Increase the safety of officers on patrol with a non-intrusive application that allows them to focus on other critical tasks.
- Cross-check every vehicle an officer passes whether or not they arouse suspicion.
- Strengthen the safety and security of your city by automatically detecting stolen vehicles, or those belonging to felons.



The AutoVu Sharp is a license plate recognition (LPR) device which functions over an IP network and precisely deciphers license plate numbers of moving and parked vehicles.



AutoVu Features and Tools

High-Resolution Camera –

With a built-in high-resolution LPR camera, the AutoVu Sharp conducts processing on the edge for a compact solution and simplified installation. It reads plates at 45 or 90 degrees on both sides of the vehicle as well as plates of vehicles parked in parallel.



Color, Sound and Priority Assignment to Hotlists – AutoVu allows users to assign different priorities to hotlists. Each priority can be configured with a different color and alarm tone, providing both visual and audible alerts so that officers can easily identify the type of hit and its importance.

Covert Hotlists – For covert investigations, law enforcement agencies can create covert hotlists where upon a hit, only the Back-Office user will be notified that a hit has occurred on a license plate of interest. The in-vehicle officer will not be alerted of the hit in order to protect either an on-going investigation or a special operation.

Wildcard Hotlists – With AutoVu, police departments can create a wildcard hotlist database where only partial license plate numbers are included. This is particularly useful when a witness cannot remember the complete license plate number of a vehicle associated with a crime.

Image and Time Capture – The system automatically records an image of the license plate, a color image of the vehicle as well as the date and time for complete evidence of the identification.

Map Display (Optional) – The system's current position and the areas covered are indicated on the map as the vehicle moves, thereby allowing officers to maximize the use of the system by covering as much ground as possible during each shift.

Wireless Data Transmission – The AutoVu system is wirelessly enabled for download of hotlists and upload of data to/from the AutoVu Back-Office.

User-Friendly Touchscreen Interface – With large buttons and touch-enabled functions, training on the system is simplified and operators' learning curve is reduced significantly.

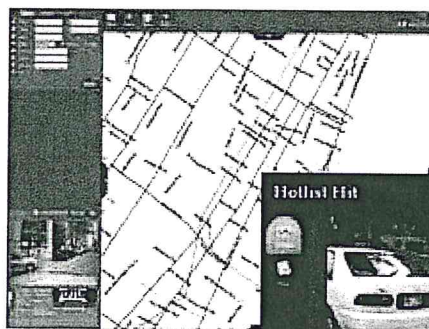
AutoVu Back-Office for Law Enforcement

The AutoVu Back-Office gives management personnel the ability to access and review all data collected throughout the day for further analysis through the following functionalities:

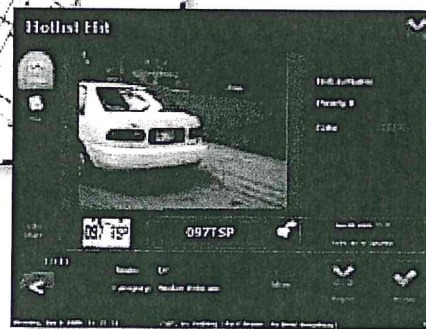
Data-Mining & Geo-Fencing – Officers can use the Back-Office to conduct searches of vehicles based on factors such as date and time, complete or partial license plate numbers, one or more specific geographic areas, type of hit, or even by the other data associated with the hotlists such as VIN, make, model or year of the vehicle of interest. All matched records are then displayed on the map at which point an officer would simply have to click on a record to view the record information and associated images.

Evidence Review – Supervisors can review all pertinent data including date, time, location, license plate and images, and print out a summary that can be used as evidence to substantiate any prosecution or criminal cases.

Reports – Supervisors can also generate performance reports per unit or for all units which offer pertinent data such as the number of license plate reads, the category and number of hits or reasons for non-enforcing a hit.



AutoVu Back-Office:
Back-end software, map
display



AutoVu Patroller:
Front-end software

About Genetec

Genetec is a pioneer in the physical security and public safety industry and a global provider of world-class IP video surveillance, access control and license plate recognition (LPR) solutions to markets such as transportation, education, retail, gaming, government and more. With sales offices and partnerships around the world, Genetec has established itself as the leader in innovative networked solutions by employing a high level of flexibility and forward-thinking principles into the development of its core technology and business solutions. Genetec's corporate culture is an extension of these very same principles, encouraging a dynamic and innovative workforce that is dedicated to the development of cutting-edge solutions and to exceptional customer care. For more information, www.genetec.com



SharpX

The World's Smallest High-Resolution License Plate Recognition Camera with Integrated Illumination

The AutoVu SharpX is the latest IP-based license plate recognition (LPR) camera by Genetec. It allows law enforcement agencies to quickly identify vehicles of interest with the highest degree of accuracy available. Advanced license plate recognition technology has been touted as a true force multiplier, and for good reasons.

Whether an agency is on the lookout for wanted felons, uninsured or prohibited drivers, or any vehicles of interest, the AutoVu SharpX can scan thousands of vehicles per shift, and alert officers when a suspect's vehicle is within the vicinity.

Why Every Law Enforcement Agency Needs AutoVu SharpX

Smallest high-resolution (1024x946) LPR camera on the market

Plate capture across three lanes of traffic (XGA)

Highest read rates in the industry

Up to 5,000 plate captures per minute

Scalable architecture includes up to one dedicated processor per camera

Plate capture up to differential speeds over 200 MPH (320 km/h)

Plate highlight feature for vehicle identification when many vehicles are within the field of view

International plate reading support

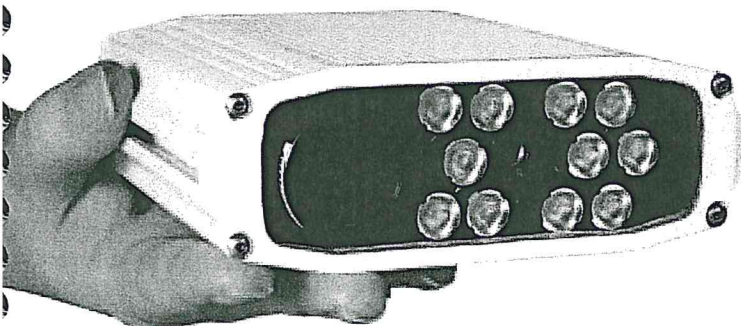
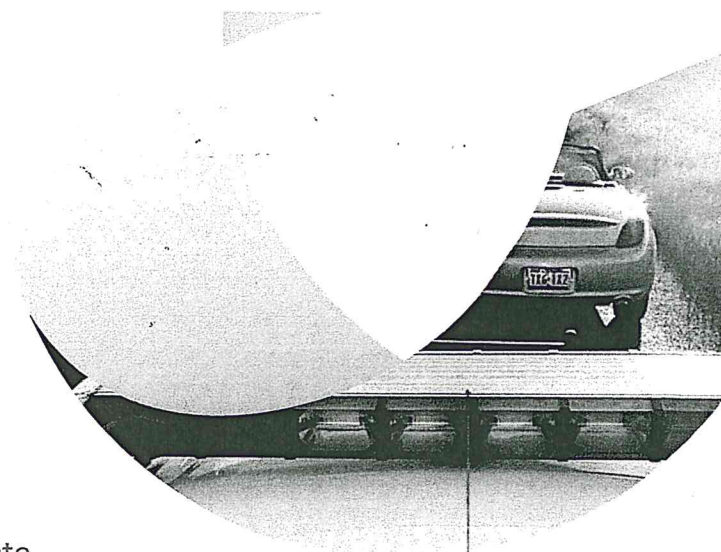
Compatible with Genetec's Unified Security Platform

Discreet Form Factor – The AutoVu SharpX is the smallest high-resolution LPR camera on the market with integrated illumination. The AutoVu SharpX's robust IP67 aluminum body stands at 1.65 inches (42 mm) tall, limiting light bar occlusion and making it less obvious to vandals. Its clever design also offers universal mounting for the grill, light bar, trunk or just about anywhere.

Unsurpassed Reading Accuracy – The AutoVu SharpX uses a progressive scan sensor with 1024 x 946 (XGA) resolution to capture the plate images for analysis. This sensor provides two to three times higher image resolution than most solutions found on the market today, ensuring better readability in bad weather, with dirty or obstructed plates, with difficult angles and across three lanes.

Superior Night and Day Performance – The AutoVu SharpX is designed with a state-of-the-art color context camera to provide the best images in a variety of environmental conditions. From morning to late night, officers can expect quality images to help identify the make, model, and even the color of a suspect vehicle.

Unified within the Security Center – The AutoVu system and SharpX camera are integral parts of the Security Center, Genetec's Unified Security Platform. This means an officer can easily incorporate the SharpX into a city-wide surveillance system or merge a stand-alone LPR system into the unified platform later on as needs arise.



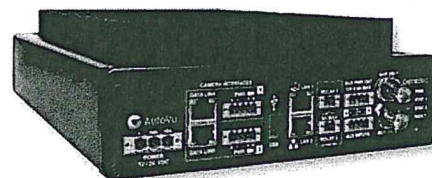
AutoVu Sharp

The World's Smallest High-Resolution License Plate Recognition Camera with Integrated Illumination

Specifications	AutoVu SharpX	AutoVu SharpX VGA
Camera lens options	• 12 mm, 16 mm, 25 mm, 35 mm, 50 mm	• 12 mm, 16 mm, 25 mm, 35 mm, 50 mm
Camera sensor	• LPR Camera XGA 1024x946 progressive scan @ 30 fps, monochrome • Color camera 640x480 @ 30 fps	• LPR Camera VGA 640x480 progressive scan @ 30 fps, monochrome • Color camera 640x480 @ 30 fps
Temperature	• -4°F to 131°F (-20°C to 55°C) operating environment • -40°F to 185°F (-40°C to 85°C) storage • includes hi-temp auto shutoff protection	• -4°F to 131°F (-20°C to 55°C) operating environment • -40°F to 185°F (-40°C to 85°C) storage • includes hi-temp auto shutoff protection
Extended Temperature Option	• -40°F to 131°F (-40°C to 55°C) operating environment	• -40°F to 131°F (-40°C to 55°C) operating environment
Vibration	• MIL-STD 810G 514.6	• MIL-STD 810G 514.6
Shock resistance	• IEC 60068-2-27	• IEC 60068-2-27
Housing and mounting	• Extruded aluminum housing with universal T-slots on either side for universal mounting	• Extruded aluminum housing with universal T-slots on either side for universal mounting
Illuminator	• Pulsed LED illuminator for effective use in 0 lux (total darkness) environments • Up to 100-foot (30-meter) range with reflective license plates • Different illumination wavelengths available	• Pulsed LED illuminator for effective use in 0 lux (total darkness) environments • Up to 70-foot (21-meter) range with reflective license plates • Different illumination wavelengths available
Water resistance / sealing	• IEC 60529: IP65 + IP67	• IEC 60529: IP65 + IP67
Dimensions	• 1.65 (h) x 4.75 (w) x 4.75 (d) inches (4.2 x 12 x 12 cm) • Excludes cabling and mounting bracket	• 1.65 (h) x 4.75 (w) x 4.75 (d) inches (4.2 x 12 x 12 cm) • Excludes cabling and mounting bracket
Weight	• 1.5 lbs (0.7 kg)	• 1.5 lbs (0.7 kg)

Specifications – AutoVu LPR Processing Unit

External interface	• 2 x 10/100/1000 Base-T Ethernet ports • 2/4 x LPR camera inputs
Dimensions	• 12.6 x 8.6 x 4.72 inches (32 x 22 x 12 cm)
Processor	• Intel® Atom™ Processor N450. One dedicated processor per camera (XGA) or per 2 cameras (VGA) to ensure maximal, per-camera, processing performance
Power supply	• 12/24 VDC @ 60 W typical (76W for 4 camera model)
Temperature	• -40°F to 150°F (-40°C to 65°C) • -40°F to 185°F (-40°C to 85°C) storage • includes hi-temp auto shutoff protection



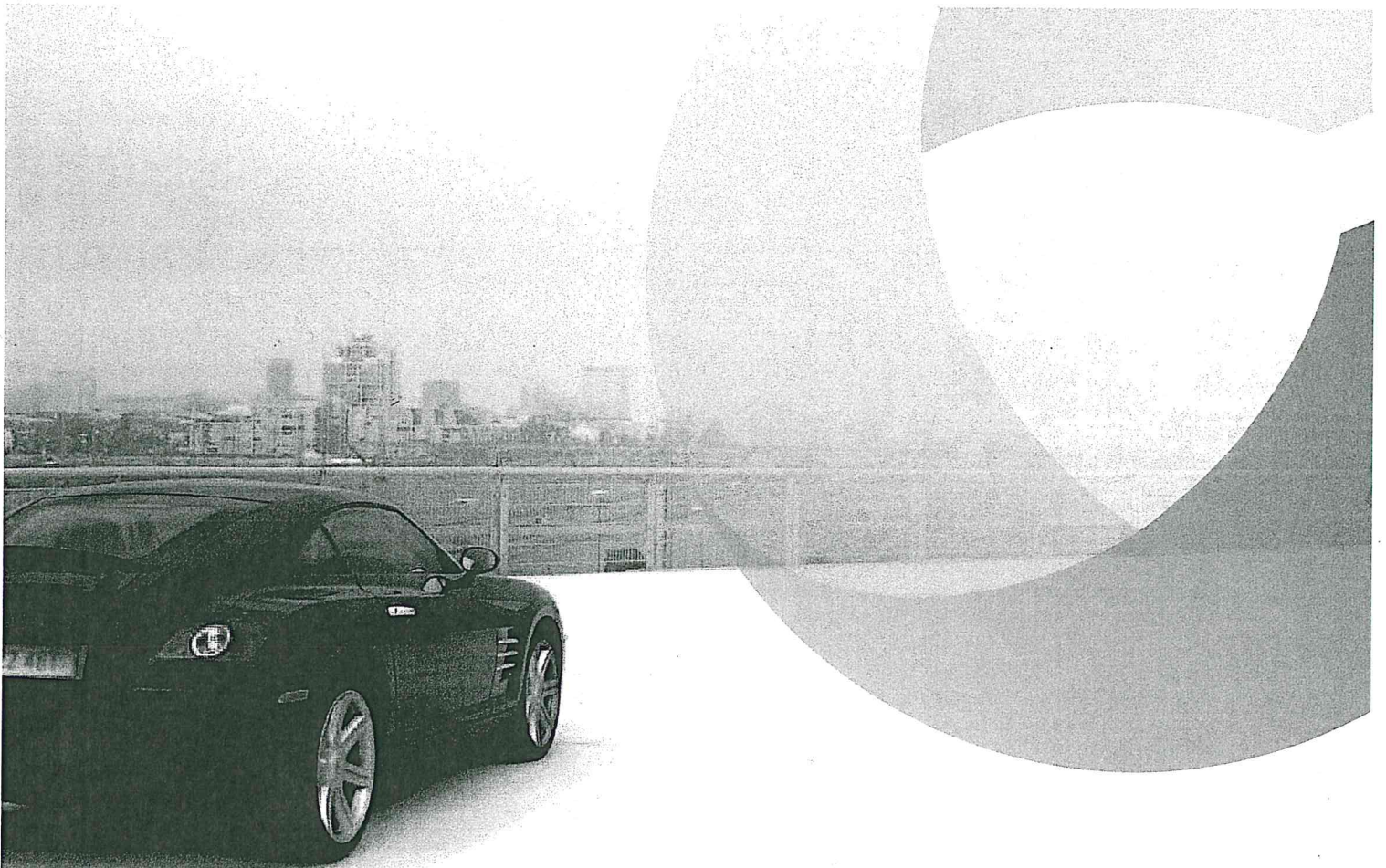
Powerful and Scalable Processing – Often a mobile LPR solution includes a trunk unit with a single processor which is divided amongst several cameras. Each AutoVu SharpX system comes with up to 4 dedicated Intel processors, ensuring that individual camera performance will not suffer with the addition of more cameras. A fully equipped vehicle can read up to 5,000 plates per minute.

About Genetec

Genetec is a pioneer in the physical security and public safety industry and a global provider of world-class IP license plate recognition (LPR), video surveillance and access control solutions to markets such as transportation, education, retail, gaming, government and more. With sales offices and partnerships around the world, Genetec has established itself as the leader in innovative networked solutions by employing a high level of flexibility and forward-thinking principles into the development of its core technology and business solutions. Genetec's corporate culture is an extension of these very same principles, encouraging a dynamic and innovative workforce that is dedicated to the development of cutting-edge solutions and to exceptional customer care. For more information, genetec.com.

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Genetec



License Plate Recognition
That Makes
Your Job Easier

Innovative Solutions

AutoVu™ is the IP license plate recognition (LPR) system of the Security Center, Genetec's unified security platform. From your vehicle or office, AutoVu helps you automate the identification of vehicle license plates. Organizations looking to enhance applications in law enforcement, parking enforcement, license plate inventory, security and access control choose AutoVu for the right reasons:

Be Automatically Notified of Vehicles of Interest

All you have to do is focus on your job. AutoVu automatically reads surrounding vehicle plates, compares them to a database and alerts you when you need to take action. This LPR system comes with powerful features to make you even more efficient: use graphical maps for configuration; conduct data-mining in your vehicle or office; and get image and time capture on every license plate read.

Rely on Accurate License Plate Reads

AutoVu is an LPR system you can rely on. With AutoVu, you will catch all license plates in the camera's field of view. AutoVu reads license plates with the highest accuracy rates in the industry. And, thanks to its unique Fuzzy Matching feature, you get the best possible matches to your database even when license plates may be undecipherable.

Reduce The Operator Learning Curve with Ease-of-Use

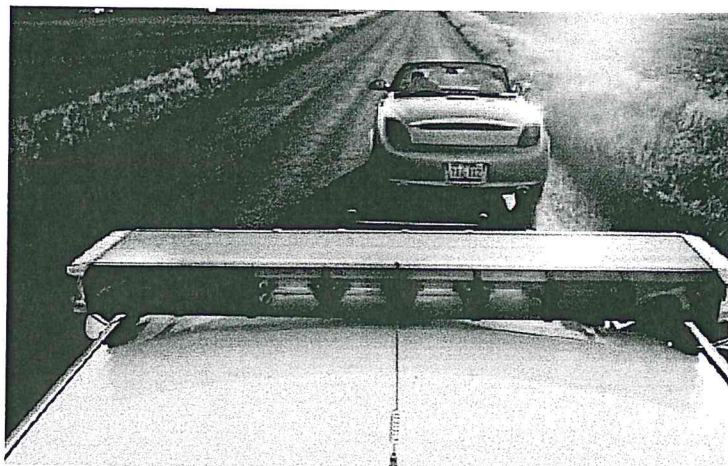
As part of Genetec's unified security platform, AutoVu comes with a very intuitive and user-friendly interface. Operators with any level of computer experience will feel at ease with this LPR system. In the office, drag and drop reads to see an image of the vehicle and its plate. Use graphical maps to review LPR data. And get reports with one click of the mouse. In the vehicle, large buttons and touch-enabled functions make training a breeze.

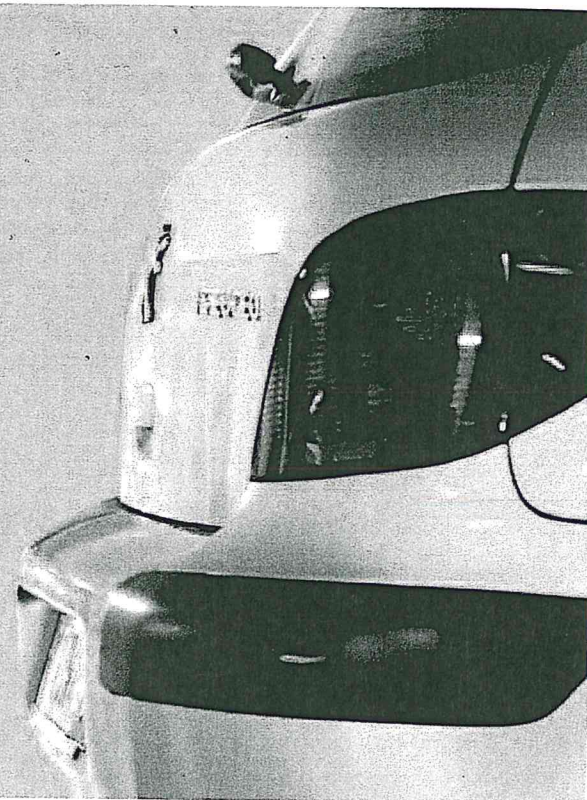
Obtain Real-Time LPR Information with IP Connectivity

AutoVu is IP-ready. There is no waiting for LPR information. You get real-time monitoring and identification of vehicle plates. The transfer of license plate information from the vehicle to your office is instantaneous. So you can take immediate action if necessary. And you can even configure and manage your LPR system over any IP network.

Take Minimal Time to Get Your System Installed

Getting AutoVu up and running is simple. Once the AutoVu camera is installed, you only need to make minimal adjustments and configuration to get your LPR system going. Databases can be uploaded at each shift or automatically on a pre-set time frame. It's an easy three-step process to LPR automation.





The AutoVu Hardware



The **AutoVu Sharp** is the IP-based license plate recognition camera. This rugged LPR device offers advanced digital video processing and superior plate reading performance. The AutoVu Sharp camera also conducts processing on the edge. This means all the processing and analytics are done inside the unit itself, making the solution compact and easy to install.

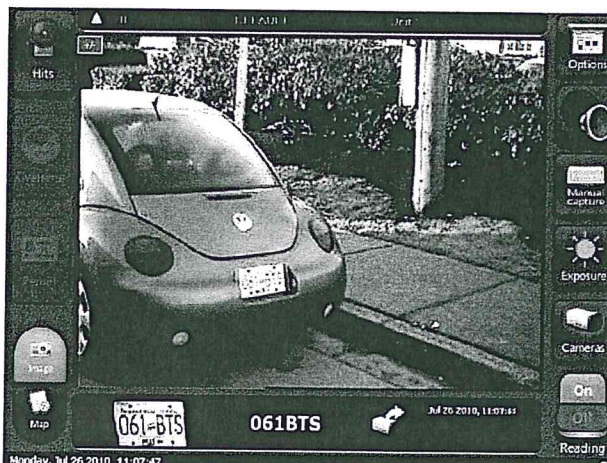
Key features of the AutoVu Sharp

- Available for both fixed and mobile applications
- Support for various international plate styles and formats
- On-board video compression and streaming
- Plate capture spanning two lanes of traffic on either side of vehicle
- Plate capture of vehicles parked in parallel, or at 45 or 90 degrees
- Plate capture up to speeds of 140 MPH (225 km/h)
- Portability from vehicle-to-vehicle

The AutoVu Software

AutoVu is the IP LPR system of Genetec's unified security platform, the Security Center. The AutoVu system within the Security Center gives you back-office management capabilities. You can access and review all collected data for further analysis.

AutoVu Patroller is the in-vehicle software of the AutoVu LPR system. You will be surprised at how easy the AutoVu Patroller is to use. With large buttons and touch-enabled functions, training on the system is easy for operators with all levels of technical experience.



Applications

Law Enforcement

Manually verifying license plates is unsafe and inefficient. With the AutoVu camera mounted on a vehicle, officers can automate the verification of vehicle license plates with a non-intrusive application. So instead of reading dozens of plates during a shift, officers can benefit from reading hundreds or thousands of plates, effortlessly. Not only will this increase officer safety, but AutoVu will also help to improve the recovery rate of stolen and wanted vehicles and apprehend more suspects.

Specific Law Enforcement Applications

Wanted vehicle and felon identification

In-vehicle data-mining

Real-time monitoring and reporting

Back-office data-mining and geo-fencing

Some System Features for Law Enforcement

Color, Sound and Priority Assignment to Hotlists. Assign different priorities to hotlists. Configure each priority with a different color and alarm tone. Get both a visual and audible alert to easily identify the type of hit and its importance.

Covert Hotlists. Ensure the discretion of an on-going investigation or a special operation with a covert hotlists. When there is a hit, only the officer at the police department using the AutoVu system within the Security Center will be alerted. The in-vehicle officer will not be alerted.

Wildcard Hotlists. Create a wildcard hotlist database with only partial license plate numbers. Use this feature when you only have a few license plate numbers of a vehicle associated with a crime.

Map Display. See the in-vehicle system's current position and the areas covered on the map from the back-office system as the vehicle moves. Maximize the use of the system by covering as much ground as possible during each shift.

Parking Enforcement

Checking permits and tire-chalking manually is overly time-consuming. Operators can mount the AutoVu camera on a vehicle, and automate city or university parking enforcement for many types of permits and time limit zones at once. Operators will become more efficient at covering vast areas, and AutoVu will help improve the collection of unpaid vehicle infractions.

Specific Parking Enforcement Applications

University or city scofflaw and permit enforcement

University or city time-limited enforcement (block face, same space and district)

University lot counts

Vehicle identification

Data-mining and evidence review

Route management and reports

Some System Features for Parking Enforcement

Show Due Prompt. Prompt AutoVu to display the areas where the time limit has expired, indicating potential vehicles that are due for verification. This way, the parking agent knows where to go next.

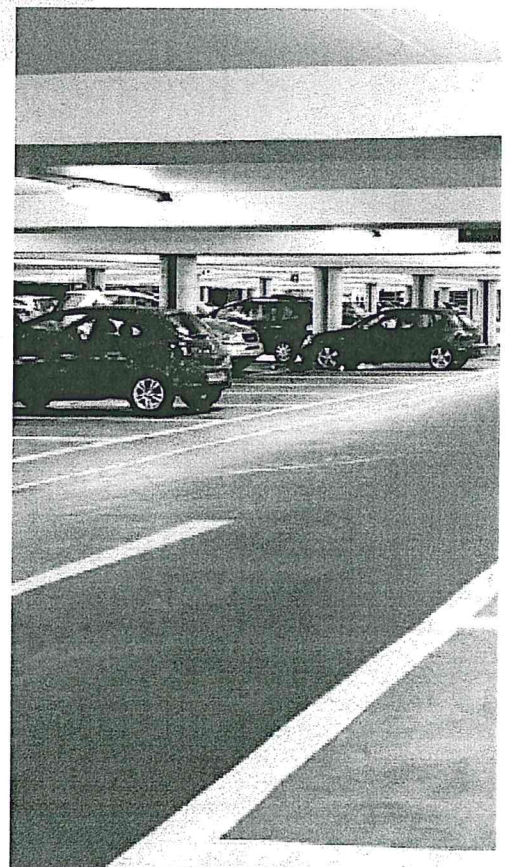
Enhanced Positioning Technology. Get accurate location data needed to support infractions with built-in GPS functionality and odometry. This is possible even in dense urban areas where GPS signal is not always accurate.

Wheel Imaging. Use wheel imaging capabilities to gather pictures of vehicles' wheels for comparison between initial and subsequent passes in a city zone. This acts as digital tire chalking. These images serve as additional evidence against infractions for same position parking enforcement.

Configuration Tool. Use the AutoVu system within the Security Center to assign parking rules and regulations to each zone. And link one or more zones to a list of associated permits and schedules.

GPS-Assisted Parking Lot Selection. With the help of integrated GPS functionality, a list of lots will appear in order from nearest to furthest to simplify the operator's task of selecting the lot to be enforced at a university.

Map-Based Lot Definition. Use the AutoVu system within the Security Center to geographically define lots by a polygon with Microsoft Bing™. Reduce the time needed for lot configuration and maintenance within your university's grounds.



Mobile License Plate Inventory (MLPI)

Manually collecting a daily vehicle inventory wastes time and resources. Mount an AutoVu camera on your vehicle to automatically collect license plate inventory in your parking facility. Every day, your operators will be more efficient and you will get automated vehicle inventory and activity reports.

Specific MLPI Applications

Automated vehicle inventory collection

Inventory reconciliation and data-mining

Inventory reporting

Some System Features for MLPI

Zone and Route Selector. Keep track of the location of every license plate read by selecting a route or a zone and row that you would like to begin scanning. Zones and rows or route selection are pre-configured during the installation phase.

Handheld Device Integration. Input license plate information into a handheld device when a vehicle is backed into a parking spot and has no front license plate. Offload the handheld inventory list into the AutoVu system within the Security Center at the end of the inventory collection.

Automatic Reconciliation. After offloading the license plate inventory, the AutoVu system in the Security Center will do an automatic reconciliation of all license plate reads. It merges data from the previous inventory so you get a detailed inventory report ready for querying and reporting.

Security and Surveillance

Stop relying on outdated technology. Mount AutoVu cameras above traffic lanes, at entrances or exits, at toll booths and other locations. AutoVu will help you secure entries and exits of facilities, get audit trails, identify wanted vehicles at your gates, on a street or a highway.

Specific Security and Surveillance Applications

Wanted vehicle and felon identification

Vehicle audit trail

Automated access control

Traffic management

Bus and taxi lane exemption

Some System Features for Security and Surveillance

Integrated Video Surveillance. Unify your LPR system with video surveillance and access control within the Security Center. Monitor live video feeds along with LPR reads and receive alerts of flagged vehicles from the AutoVu system. And review video associated with LPR reads or hits in investigations.

Automatic Event and Alarms. Get automated alarms or events from the AutoVu system when a black-listed, wanted, or stolen vehicle is detected. That means you can choose to respond only to events that are deemed urgent.

Advanced Data-Mining. Conduct searches of vehicles based on factors such as date and time, complete or partial license plate numbers, one or more specific geographic areas, or type of hit. Or, search by the other data associated with the hotlists such as VIN, make, model or year of the vehicle of interest.

Standalone or Unified with Video Surveillance and Access Control

AutoVu can be installed as a standalone LPR system or unified with Genetec's Omnicast IP video surveillance and Synergis IP access control systems within the Security Center. Unification within the Security Center offers customers a single platform from which to manage and monitor all of their security and safety applications, generate consolidated reports, and centralize all of their alarm management.

Third-Party System Integration. Integrate other software applications to fit with existing business processes with an advanced SDK. Or use an XML plugin to easily share information between systems without the efforts of a full integration.

More System Capabilities and Technical Specifications

User Interface

- Fully configurable and task-oriented user interface
- Dedicated LPR tasks for monitoring and reporting
- User configurable event list and display tile views
- View LPR events, associated pictures and video within each tile
- Advanced reporting tool for LPR reads and hits

System Configuration and Monitoring

- Monitoring and management of LPR events and alarms
- Management of all LPR entities
- Automatic email notifications
- Manual license plate input
- Accept/reject hit confirmation
- Fuzzy matching including OCR equivalent characters
- In-vehicle data-mining with full or partial license plate searches
- Map-based hit and read review
- Silent operation mode
- Import tool for third-party data (CSV file format)
- Support for custom metadata fields
- Macros or custom scripting support
- LPR XML import/export

Advanced Reporting

- Configuration, hit and read, route playback, inventory, license plate read/hits per day, daily usage statistics and logons per day reports
- Advanced search filters based on date, time, patrolling unit, hotlist, geographical area, vehicle make, model, year or VIN
- Print and email actions
- PDF, Microsoft Excel, and CSV export options
- Customization options include setting filters, report lengths, and timeout period
- Automatic email schedules of pre-configured report templates

Alarm Management

- Customized license plate read and hit alarm triggers
- Full range of alarm management controls
- User-defined procedures
- Mandatory incident entry upon alarm acknowledgement

System Security

- Encrypted communications between client and server applications
- Configurable user and user group privileges
- Secure remote access capabilities
- Authenticated user logins
- Support for Windows Active Directory
- User activity logs and audit trails
- HTTPS support for web client

LPR Read and Hit Transmission

- LPR hits and reads transmitted over standard LANs, WANs, Internet and via USB
- Wireless connectivity over 802.11a/b/g or cellular
- Remote access via DSL, cable, cellular, ISDN, T1 or T3

Hardware and Software Integrations

- Unified with Omnicast video surveillance and Synergis IP access control within the Security Center unified security platform
- Video analytics solutions, server or edge-based
- Perimeter protection systems
- Intelligent transportation systems (ITS)
- Ticketing systems
- Major third-party access control systems
- In-vehicle and rugged laptops
- Hard-held computers
- Video walls

About Genetec

Genetec is a pioneer in the physical security and public safety industry and a global provider of world-class IP license plate recognition (LPR), video surveillance and access control solutions to markets such as transportation, education, retail, gaming, government and more. With sales offices and partnerships around the world, Genetec has established itself as the leader in innovative networked solutions by employing a high level of flexibility and forward-thinking principles into the development of its core technology and business solutions. Genetec's corporate culture is an extension of these very same principles, encouraging a dynamic and innovative workforce that is dedicated to the development of cutting-edge solutions and to exceptional customer care. For more information, genetec.com.



AutoVu

for Municipal Parking Enforcement



IP-Based License Plate Recognition (LPR)

As an advanced vehicle-mounted LPR solution, AutoVu facilitates municipal parking enforcement by automatically collecting license plates, comparing them against selected databases and alerting users of vehicles in violation. With built-in back-office software, municipalities are also able to collect data that can be used as evidence in case of ticket disputes, as well as better manage time-limit and permit zones. Developed with innovative features and state-of-the-art technology, AutoVu is a comprehensive and easy-to-use LPR solution that can be leveraged for an assortment of benefits, contributing to effective parking enforcement.



AutoVu Applications for Parking Enforcement



Residential parking permit enforcement – At the beginning of the shift, permit lists are automatically downloaded to the AutoVu system. The operator then manually selects the permit zone which they intend to enforce via the touchscreen

interface. While the vehicle is on patrol, AutoVu automatically alerts the operator of vehicles that do not possess a valid permit, showing images of both the vehicle and the license plate.

Time-limited enforcement – In parking areas where vehicles are allowed to park for a specific duration of time, AutoVu electronically chucks vehicles by collecting license plate numbers of parked vehicles. During subsequent passes, AutoVu electronically chucks new vehicles and automatically flags vehicles that have remained parked in excess of the allowable limit, displaying recorded times and images of the vehicle, the license plate and vehicle wheels (optional) from both passes. To facilitate enforcement, operators can prompt the system to show a map indicating all areas where time limit has expired.

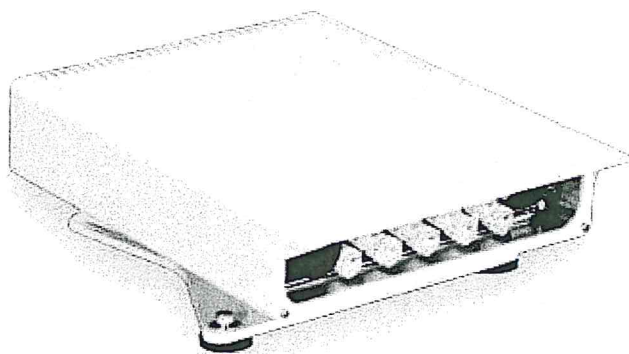
AutoVu can be used to enforce time-limit parking based on various municipal regulations such as block face, same space, and parking in a district or area.

Permit and time-limit enforcement – In cities where zones have both permit and time-limit enforcement regulations, AutoVu can monitor both applications simultaneously.

Wanted vehicle identification – More than flagging parking violators, AutoVu alerts operators of scofflaws, stolen or other wanted vehicles by comparing license plates to customer-acquired hot lists. This makes AutoVu a multifunctional LPR solution that can be used to enforce parking regulations while enhancing residents' safety.

How Will Your Municipality Benefit from AutoVu?

- Automate the enforcement of various types of permits and time limit zones.
- Improve the collection of unpaid vehicle infractions through scofflaw hot list identification.
- Become more efficient at covering vast enforcement areas.
- Use data as evidence against infractions and to optimize route management.
- Strengthen the safety and security of your city by automatically detecting stolen vehicles, or those belonging to felons.



The AutoVu Sharp is a License Plate Recognition (LPR) device which functions over an IP network and precisely deciphers license plate numbers of moving and parked vehicles.



AutoVu

for Municipal Parking Enforcement

AutoVu Features and Tools

High-Resolution Camera

–AutoVu's high-resolution LPR camera conducts processing on the edge for a compact solution and simplified installation that reads plates at 45 or 90 degrees on both sides of the vehicle as well as plates of vehicles parked in parallel.

Image and Time Capture –

The system automatically records an image of the license plate, a color image of the vehicle as well as the date and time for complete evidence of the infraction.

Map Display – The system's current position and the zones covered are indicated on the map as the vehicle moves, thereby allowing the system to be used effectively and for maximum coverage.

Show Due Prompt – Operators can prompt AutoVu to display the areas where the time limit has expired, indicating those that are due for verification.

Wireless Data Transmission – The AutoVu system is wirelessly enabled for download of hot lists and permit data and upload of enforcement data from/to the AutoVu Back-Office.

User-Friendly Touchscreen Interface – With large buttons and touch-enabled functions, training on the system is simplified and operators' learning curve is reduced significantly.

Enhanced Positioning Technology – With built-in GPS functionality and odometry, AutoVu provides accurate location data needed to support infractions, even in dense urban areas where GPS signal is not always accurate.

Wheel Imaging – As an optional feature, AutoVu provides wheel imaging capabilities where operators can gather pictures of vehicles' wheels for comparison between initial and subsequent passes. These images serve as additional evidence against infractions for same position parking enforcement.



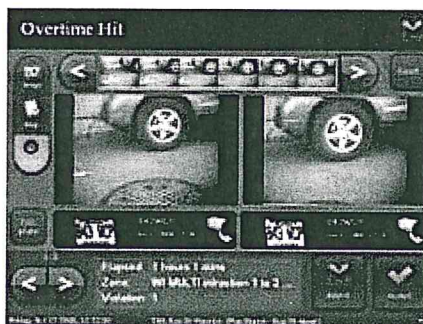
AutoVu Back-Office for Parking Enforcement

The AutoVu Back-Office gives management personnel the ability to access and review all data collected throughout the day for further analysis through the following functionalities:

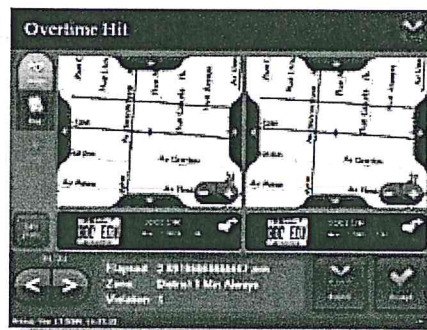
Evidence Review – For all violations, enforced or rejected, a supervisor can review all pertinent data including date, time, location, license plate and images, and print out a summary that can be used as evidence to substantiate an infraction.

Route Management – Supervisors can replay the actual route that the patrol vehicle has taken during each shift. This information will help optimize usage of the system.

Reports – Supervisors can also generate performance reports which offer pertinent data such as the number of license plate reads on an hourly basis, the type and number of enforced parking violations, and the number of wanted vehicle matches.



AutoVu Patroller:
Front-end software,
wheel-imaging display



AutoVu Patroller: Front-end software, map display

About Genetec

Genetec is a pioneer in the physical security and public safety industry and a global provider of world-class IP video surveillance, access control and license plate recognition (LPR) solutions to markets such as transportation, education, retail, gaming, government and more. With sales offices and partnerships around the world, Genetec has established itself as the leader in innovative networked solutions by employing a high level of flexibility and forward-thinking principles into the development of its core technology and business solutions. Genetec's corporate culture is an extension of these very same principles, encouraging a dynamic and innovative workforce that is dedicated to the development of cutting-edge solutions and to exceptional customer care. For more information, www.genetec.com



AutoVu for University Campuses



IP-Based License Plate Recognition (LPR)

As an advanced vehicle-mounted LPR solution, AutoVu facilitates university permit and time-limited parking enforcement by automatically collecting license plates, comparing them against selected databases and alerting users of vehicles in violation. With a built-in back-office software, universities are also able to better manage various campus parking facilities and their respective restrictions, by further analyzing collected data after each shift. Developed with innovative features and state-of-the-art technology, AutoVu is a comprehensive and easy-to-use LPR solution that universities can leverage for an assortment of applications and benefits.



AutoVu Applications for Universities



Permit parking enforcement – At beginning of a shift, permit lists can be downloaded wirelessly to AutoVu. The system will accommodate lots that have one or multiple associated lists of valid permit types. As the university's enforcement

vehicle patrols a designated parking lot, the AutoVu system will automatically flag vehicles that do not possess a valid permit for the specific lot, as well as permit holders that are not allowed to park in the lot due to restrictions.

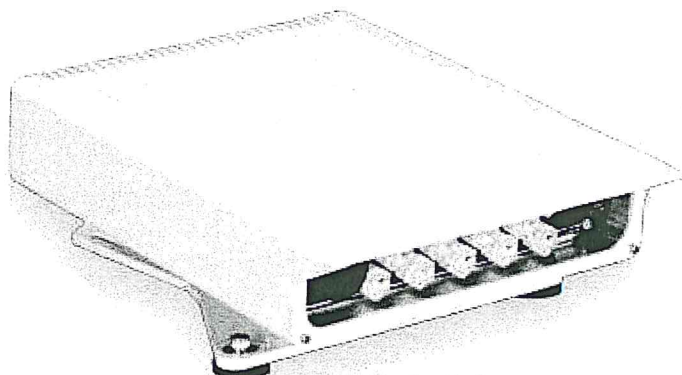
Time-limited / Non-permit enforcement – In parking facilities where vehicles are allowed to park without permits for a specific duration of time, AutoVu electronically marks parked vehicles. During subsequent passes through the lot, AutoVu then automatically alerts the operator if a vehicle has remained parked in excess of the specified time limit. Images of the vehicles and license plates that were read during both passes are displayed along with corresponding and elapsed times.

Wanted vehicle identification – More than flagging parking violators, AutoVu alerts operators of scofflaws, stolen or other wanted vehicles by comparing license plates to multiple customer-acquired hot lists. This makes AutoVu a multifunctional LPR solution, helping to enforce parking regulations as well as to keep a university campus safe.

Lot counts – When a parking lot is specified, AutoVu will automatically keep count of the number of vehicles that are scanned. Occupancy of the lot is then calculated as a percentage based on the number of vehicles read in comparison to the total lot capacity. The vehicle count is reset to zero every time a new lot is selected.

How Will Your University Benefit from AutoVu?

- Automate the strict enforcement of several types of permits and time limits on campus.
- Strengthen the safety and security of your university campus by automatically detecting black-listed vehicles.
- Cover campus-wide parking lots in a more time-efficient manner.
- Use data as evidence against infractions and optimize parking facility management.
- Improve the collection of unpaid vehicle infractions.
- Optimize campus permit and parking regulations based on collected lot occupancy data.



The AutoVu Sharp is a License Plate Recognition (LPR) device which functions over an IP network and precisely deciphers license plate numbers of moving and parked vehicles.



AutoVu for University Campuses

AutoVu Features and Tools

High-Resolution Camera –

AutoVu's high-resolution LPR camera conducts processing on the edge for a compact solution and simplified installation that reads plates at 45 or 90 degrees on both sides of the vehicle.

Image and Time Capture –

The system automatically and accurately records an image of the license plate, a color image of the vehicle as well as the date and time for complete evidence of the infraction.

Moving Map Display – The system's current position and the lots covered are indicated on the map as the vehicle moves, thereby allowing the system to be used effectively and for maximum coverage.

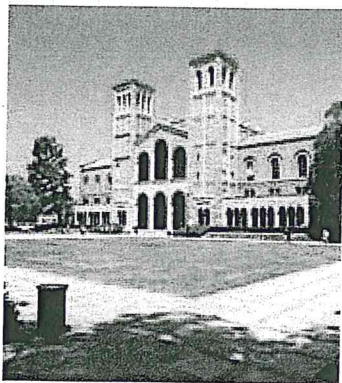
GPS-Assisted Parking Lot Selection – With the help of integrated GPS functionality, a list of lots will appear in order from nearest to furthest to simplify the operator's task of selecting the lot to be enforced.

Google Earth – Lots can be defined geographically by a polygon using Google Earth, reducing the time needed for lot configuration and maintenance within a university's grounds.

Wireless Data Transmission – The AutoVu system is wirelessly enabled for download of hot list data and upload of enforcement data from/to the AutoVu Back-Office.

User-Friendly Touch Screen Interface – With large buttons and touch-enabled functions, training on the system is simplified and operators' learning curve is reduced significantly.

Automatic System Boot and Shutdown – AutoVu automatically boots up and shuts down when the enforcement vehicle's ignition is started or turned off.



AutoVu Back-Office for University Campuses

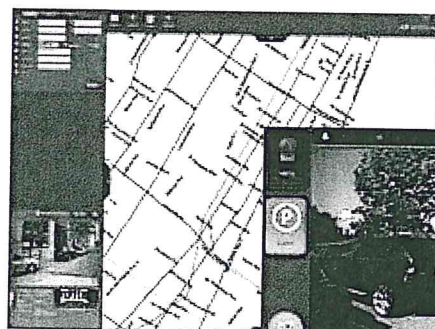
The AutoVu Back-Office gives management personnel the ability to access and review all data collected throughout the day for further analysis through the following functionalities:

Evidence Review – For all violations, enforced or rejected, a supervisor can review all pertinent data including date, time, location, license plate and vehicle images, and print out a summary that can be used as evidence to substantiate an infraction.

Route Management – Supervisors can replay the actual route that the patrol vehicle has taken during each shift. This information will help optimize usage of the system.

Reports – Supervisors can also generate performance reports which offer pertinent data such as the number of license plate reads on an hourly basis, the type and number of enforced parking violations, and the number of wanted vehicle matches, including enforced and not enforced hits.

Configuration Tool – Equipped with a configuration tool, supervisors can assign parking rules and regulations to each lot, linking one or more lots to a list of associated permits and schedules. As each lot may have multiple permits depending on the time of day, the configuration tool ultimately allows for regulation customization of a university's entire parking facility.



AutoVu Back-Office:
Back-office reporting
software



AutoVu Patroller:
Front-end software

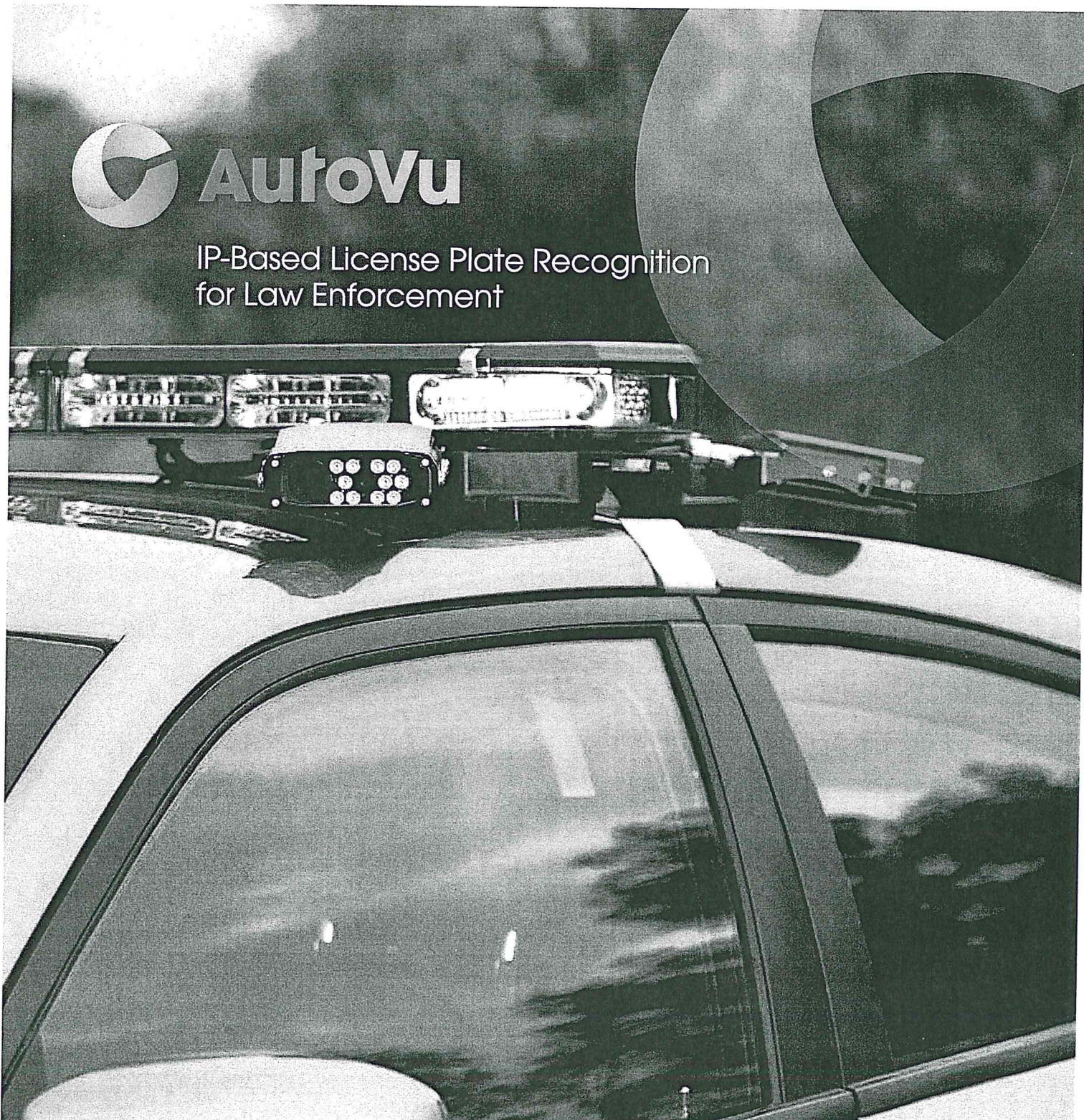
About Genetec

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Genetec



IP-Based License Plate Recognition
for Law Enforcement



Advancements in license plate recognition (LPR) technology have enabled police agencies worldwide to apprehend more wanted suspects and recover more stolen vehicles, all while improving the safety of those on duty. Choosing the right LPR system, though, is vital to ensure a reliable solution to detect suspected vehicles and potential threats.



Genetec AutoVu provides officers the most accurate and reliable LPR system in the industry, ensuring that thousands of plates can be read effortlessly during each shift. Available as both **fixed** and **mobile** camera systems, AutoVu has been engineered, tested, and proven to meet the demands of law enforcement applications.

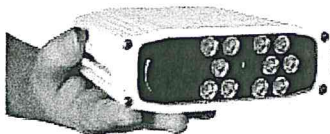
AutoVu System Overview

Hardware

The AutoVu Sharp family of IP-based LPR devices leads the industry in license plate read rates, ensuring an effective solution for police operations. The Sharp and SharpX are designed to provide the most accurate plate reads every shift, more plate reads in bad weather, or at poor angles, and even at high speeds. From vehicle mounted systems to fixed perimeter installations, AutoVu enables organizations to automate license plate identification, and share critical data amongst officers.

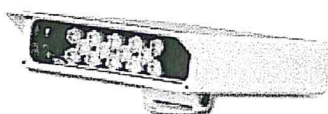
AutoVu SharpX

- Plate capture over three lanes of traffic
- Up to 5,000 plate captures per minute
- Plate capture up to differential speeds of 200 MPH (320 km/h)
- Smallest high-resolution LPR camera on the market



AutoVu Sharp

- Easily portable from vehicle-to-vehicle
- On-board video compression and analytics
- Plate capture up to differential speeds of 140 MPH (225 km/h)
- All-in-one solution with limited wiring required



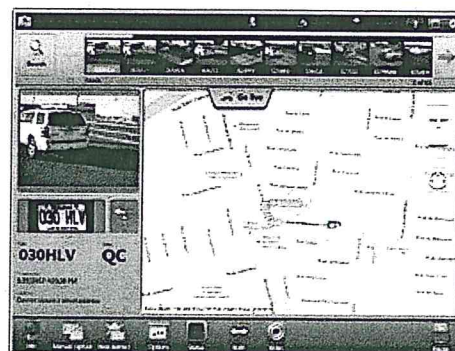
Software

AutoVu Patroller is the intuitive in-vehicle control interface of the AutoVu system, providing easily accessible features for officers onboard, and allowing them to monitor incoming reads from LPR cameras. With touch-enabled functions, training on the system is easy for operators of all levels of technical experience.

Security Center is Genetec's unified security platform that provides real-time monitoring of AutoVu events, alarm management, as well as advanced data-mining and reporting capabilities. As license plate reads and hits are gathered from patrolling units in the field and from fixed AutoVu Sharp units, information is relayed to Security Center operators. In the case of fixed applications, not only can operators monitor the incoming reads from LPR cameras, but can also view live video that is captured from the Sharp camera.

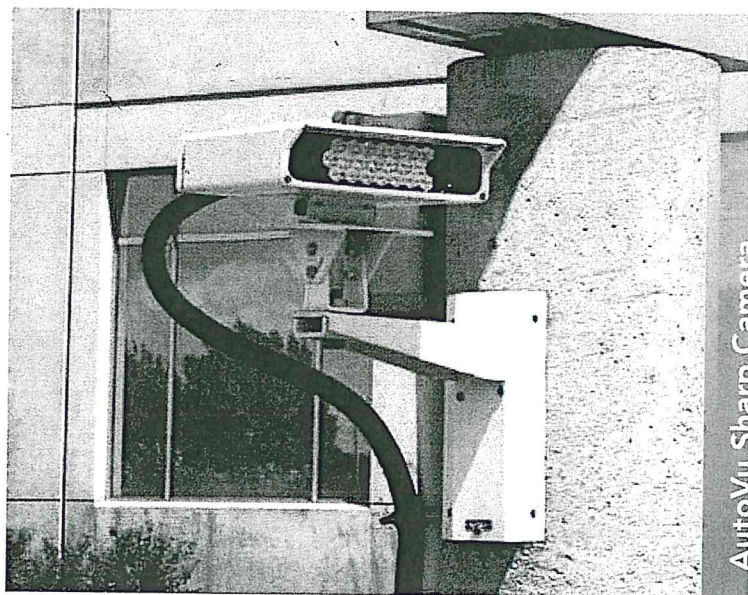
AUTOVU PATROLLER ▶

On-board navigation and monitoring interface. LPR information can be sent to Security Center in real-time through live transmission.





AutoVu SharpX Camera



AutoVu SharpX Camera

5 Reasons For Choosing AutoVu

Highest Accuracy Rate in the Industry

Backed by over 15 years' experience in LPR technology development, and the highest plate capture and recognition rates in the industry, police agencies trust AutoVu to identify all license plates within the camera's field of view. By combining state-of-the-art IP-based LPR cameras and advanced software features, AutoVu ensures highly-accurate verification analysis to provide officers with the best possible match of every license plate and to maximize wanted-vehicle identification within databases of vehicles of interest.

Ease of Use

AutoVu is designed to automate and simplify the verification of license plates against multiple hotlists, increasing the safety of officers on patrol with a non-intrusive application that allows them to focus on other critical tasks, while alerting them, and the backoffice, when threats are detected. To ensure that operators feel at ease with this LPR system, AutoVu provides a user-friendly interface and features, including touch-enabled functions, graphical maps, associated image and time captures on every read.

Purpose-Built, Real-Time Surveillance

With LPR cameras engineered to meet the demands of fixed and mobile law enforcement operations, and an advanced feature set to support officers on duty, the AutoVu system is an ideal choice for police agencies requiring a field-proven LPR solution. Because AutoVu is IP-based, users get real-time surveillance and identification of plates, while officers can also monitor the live update of LPR information using the Security Center client.

Deploy as a Standalone or Think Bigger

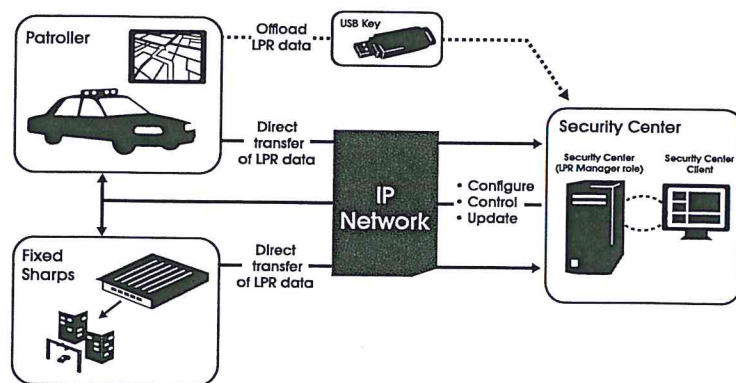
AutoVu can easily be deployed as either a standalone system, or incorporated within a greater security and surveillance environment. Unification with video surveillance and access control systems is made easy within the Security Center platform and its video and access control modules, Omnicast, and Synergis. Through this single application, cities and police agencies can manage and monitor their LPR and video surveillance feeds, generate consolidated reports and centralize their alarm management.

Advanced Reporting and Data Mining Capabilities

When reviewing plate reads or when receiving new wanted vehicle identifications, officers can easily search for full or partial license plates from their vehicle. Operators can rapidly review each hit corresponding to searches, as well as any associated data, including geographic coordinates.

With Security Center, users can generate a myriad of LPR-related reports that are highly intuitive and provide operators with a great deal of flexibility, allowing them to filter results based on date, time, patrolling unit, hotlist or area, and much more. Daily usage statistics and logon reports can also be queried to retrieve hit and read statistics, route playback data, and inventory information. Through the use of graphical displays, data is visualized and easily understood, as it is overlaid atop of maps pinpointing each read, hit, and vehicle coordinates.

AUTOVU SYSTEM DIAGRAM ▼



AutoVu License Plate Recognition Key Features

Fuzzy Matching	Due to environmental factors, such as dirt or snow accumulation on license plates, errors sometime occur in a read. The fuzzy matching feature enhances verification within AutoVu to ensure that even if a read is imperfect, operators are still getting the best possible matches of every license plate to the database of vehicles of interest. Fuzzy matching analyzes incomplete license plate reads, containing one or more errors, against a hotlist and alerts the officer in case of any potential matches.
In-Vehicle Mapping	AutoVu is equipped with intuitive graphical features, including in-vehicle mapping, to help ensure accuracy and ensure operators can remain effective while on duty. Accessible from within the vehicle or the backoffice, map displays provide operators an easier method to not only visualize the location of a read but also generates a specific location such as a street address.
Wildcard Hotlists	When only partial license plate numbers are available to identify a suspect vehicle, officers can create a wildcard hotlist database in order to rapidly identify potential hits. Notifications of hotlist hits can be identified with different sounds, colors, and priority assignments than those of definite matches.
Covert Hotlists	Covert hotlists are available to ensure the discretion of an on-going investigation or special operation. When a hit is identified, only the authorized officer at the Security Center station will be notified, while the in-vehicle patroller will not be alerted. This enables enforcement officials to assign multiple objectives to the vehicle and backend systems, while not interrupting the priorities of officers on duty.
Automatic Events and Alarms	Officers can receive automated alarms and events from the AutoVu system when a black-listed, wanted, or stolen vehicle is detected. This allows officials to prioritize and respond to the events deemed most urgent.
Live Data Transmission	The AutoVu system ensures officers are kept up-to-date with the latest information through the live update of LPR reads and hits. Using the Security Center client, officers can remotely monitor one or more Patroller units, fixed Sharp cameras, or specific hotlists in real-time.
Third-Party System Integration	Through its advanced SDK, AutoVu can integrate with other software applications to fit within existing workflows and operational processes.

Put AutoVu to the test with the new
Pilot to Purchase Program!

You can now get hands-on experience with the market's leading LPR technology at no cost. Through Genetec's new pilot program, law enforcement agencies can now receive a free trial of AutoVu to test on their vehicle.

For more details, and to participate in the Pilot to Purchase Program, contact us at sales@genetec.com

WHAT'S INCLUDED

- A multi-camera LPR system with in-vehicle and back-office software for 60 days
- Full installation of software, vehicle equipment, and operator training
- Technical and field support for 60 days

* Customers must supply their own in-vehicle computer and back-end server.

For full technical specifications see:

- AutoVu SharpX Camera Data Sheet
- AutoVu Sharp Camera Data Sheet

Genetec

License Plate Recognition | Video Surveillance | Access Control

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